ORDER NO. ITD0404012A1
B19

Service Manual

Progressive Plasma Television

Simplified

TH-42PA25U-P

GP6DU Chassis

Please file and use this manual together with the service manual for Model No. / TH-42PA20U/P (Main), ORDER NO. ITD0306013C1, / TH-42PA20U/A (Simplified), ORDER NO. ITD0312106A1.

Panasonic

1. Difference point

1.1. Mechanical Repalcement Parts List

Ref. No.	Parts No.		Part Name & Description	Remark
	Model No.	Model No.		
	TH-42PA20U/P	TH-42PA25U/P		
	TPCB26401	TPCB62001	BOTTOM CARTON	CHANGED
	TPCB42401	- - - - -	CARTON BOX	CHANGED
	TPCB42501	- - - - -	BOTTOM CARTON	DELETED
	TPCB43301	TPCB61902	CARTON BOX	DELETED
	TPDA0641	TPDA1013	CUSHION (UPPER)	CHANGED
	TPDA0642-2	TPDA1014	CUSHION (BOTTOM)	CHANGED
	- - - - -	TPDA1015	CUSHION (BOTTOM)	ADDED
	TPDA0789	- - - - -	CUSHION (UPPER)	DELETED
	TPDA0790	- - - - -	CUSHION (BOTTOM)	DELETED
	TPDF0737	TPDF1260	PAPER BOX	CHANGED
	TPDF0878	TPDF1256	UPPER PAD	CHANGED
	TPDF1087	- - - - -	UPPER PAD	DELETED
	TTEA0185	TTEA0197	ESCUTCHEON	CHANGED
	TTUA0701	TTUA0942	REAR COVER	CHANGED

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Service Manual

Progressive Plasma Television

Simplified

TH-42PA20U-A
GP6DU Chassis

Please file and use this manual together with the service manual for Model No. / TH-42PA20U/P (Main), ORDER NO. ITD0306013C1.

Panasonic®

1. Difference point

1.1. Electrical Replacement Parts List

Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	TH-42PA20U/A		
RTL	TXN/D10QCS	TZTNP01TTSU	CIRCUIT BOARD D	
IC9702	C3EBJC000038	TVRN207-1	IC	
RTL	TNPA2869	TNPA3083	CIRCUIT BOARD C1	
C7103	TCUY1C105ZFN	-----	C 1UF, 16V	
C7106	-----	TCUY1C105ZFN	C 1UF, 16V	
C7111	F1K2A1040004	-----	C 0.1UF, 100V	
C7113	F1K2A1040004	F1K2A474A006	C 0.47UF 100V	
C7115	F1K2A1040004	F1K2A474A006	C 0.47UF 100V	
C7117	-----	F1K2A474A006	C 0.47UF 100V	
C7135	-----	TCUY1C105ZFN	C 1UF, 16V	
C7136	-----	ECJ3XB0J106M	C 10UF, M,6.3V	
C7137	-----	TCUY1C105ZFN	C 1UF, 16V	
C7138	-----	ECJ3XB0J106M	C 10UF, M,6.3V	
C7139	-----	TCUY1C105ZFN	C 1UF, 16V	
C7140	-----	ECJ3XB0J106M	C 10UF, M,6.3V	
C7147	TCUY1C105ZFN	-----	C 1UF, 16V	
C7148	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7149	TCUY1C105ZFN	-----	C 1UF, 16V	
C7150	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7151	TCUY1C105ZFN	-----	C 1UF, 16V	
C7152	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
CB1-B3	K1MN80B00004	K1MN48A00002	CONNECTOR	
FL7106	-----	ELKE103FA	NOISE FILTER	
L7106	ELKE103FA	-----	NOISE FILTER	
L7111-13	-----	J0JHC0000096	CHIP INDUCTOR	
R7102,03	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7105	ERJ6GEYJ102	-----	M 1KOHM J 1/10W	
R7106,07	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7110	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7112-16	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7117	ERJ14YJ220	ERJ6GEYJ224	M 220KOHM J 1/10W	
R7118	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7119	ERJ14YJ220	ERJ6ENF1651	M1.65KOHM 1/10W	
R7120	ERJ14YJ220	ERJ6GEYJ102	M 1KOHM J 1/10W	
R7121	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7125	-----	ERJ6GEYJ102	M 1KOHM J 1/10W	
R7137-41	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7162,63	ERJ3GEY0R00	ERJ3GEYJ181	M 180 OHM J 1/16W	
R7164,65	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7166,67	ERJ3GEYJ220	ERJ3GEYJ151	M 150 OHM J 1/16W	
R7168,69	ERJ3GEYJ220	-----	M 22 OHM J 1/16W	

Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	TH-42PA20U/A		
R7172,73	ERJ3GEYJ121	-----	M 120 OHM J 1/16W	
R7175-77	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7190	ERJ6GEYJ224	-----	M 220KOHM J 1/10W	
RTL	TNPA2870	TNPA3084	CIRCUIT BOARD C2	
C7205	-----	TCUY1C105ZFN	C 1UF, 16V	
C7211	F1K2A1040004	ECJ3XB2A474K	C 0.47UF 6.3V	
C7213	F1K2A1040004	F1K2A474A006	C 0.47UF 100V	
C7215	-----	F1K2A474A006	C 0.47UF 100V	
C7217	F1K2A1040004	F1K2A474A006	C 0.47UF 100V	
C7219	F1K2A1040004	-----	C 0.1UF, 100V	
C7237	-----	TCUY1C105ZFN	C 1UF, 16V	
C7238	-----	ECJ3XB0J106M	C 10UF, M,6.3V	
C7239	-----	TCUY1C105ZFN	C 1UF, 16V	
C7240	-----	ECJ3XB0J106M	C 10UF, M,6.3V	
C7244	TCUY1C105ZFN	-----	C 1UF, 16V	
C7246	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7250	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7406	TCUY1C105ZFN	-----	C 1UF, 16V	
CB4-B7	K1MN80B00004	K1MN48A00002	CONNECTOR	
FL7207-09	-----	ELKE103FA	NOISE FILTER	
L7207-09	ELKE103FA	-----	NOISE FILTER	
L7214-17	J0JHC0000096	-----	CHIP INDUCTOR	
R7202,03	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7205	ERJ6GEYJ102	-----	M 1KOHM J 1/10W	
R7206,07	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7210	-----	ERJ14YJ220	M 22 OHM J 1/4W	
R7212,13	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7216	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7217	ERJ14YJ220	ERJ6GEYJ224	M 220KOHM J 1/10W	
R7218	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7219	ERJ6GEYJ224	-----	M 220KOHM J 1/10W	
R7225	-----	ERJ6GEYJ102	M 1KOHM J 1/10W	
R7230	TAJAAH0470JV	ERJ3GEY0R00	M 0 OHM 1/16W	
R7232	TAJAAH0470JV	ERJ3GEY0R00	M 0 OHM 1/16W	
R7268,69	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7286,87	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7289,90	ERJ3GEYJ181	TAJAAH0101JV	M 100 OHM J 1/16W	
R7291,92	ERJ3GEYJ181	-----	M 180 OHM J 1/16W	
R7293	ERJ3GEYJ121	ERJ3GEYJ151	M 150 OHM J 1/16W	
R7294,95	ERJ3GEYJ121	-----	M 120 OHM J 1/16W	
R7296	ERJ3GEYJ121	ERJ3GEYJ151	M 150 OHM J 1/16W	

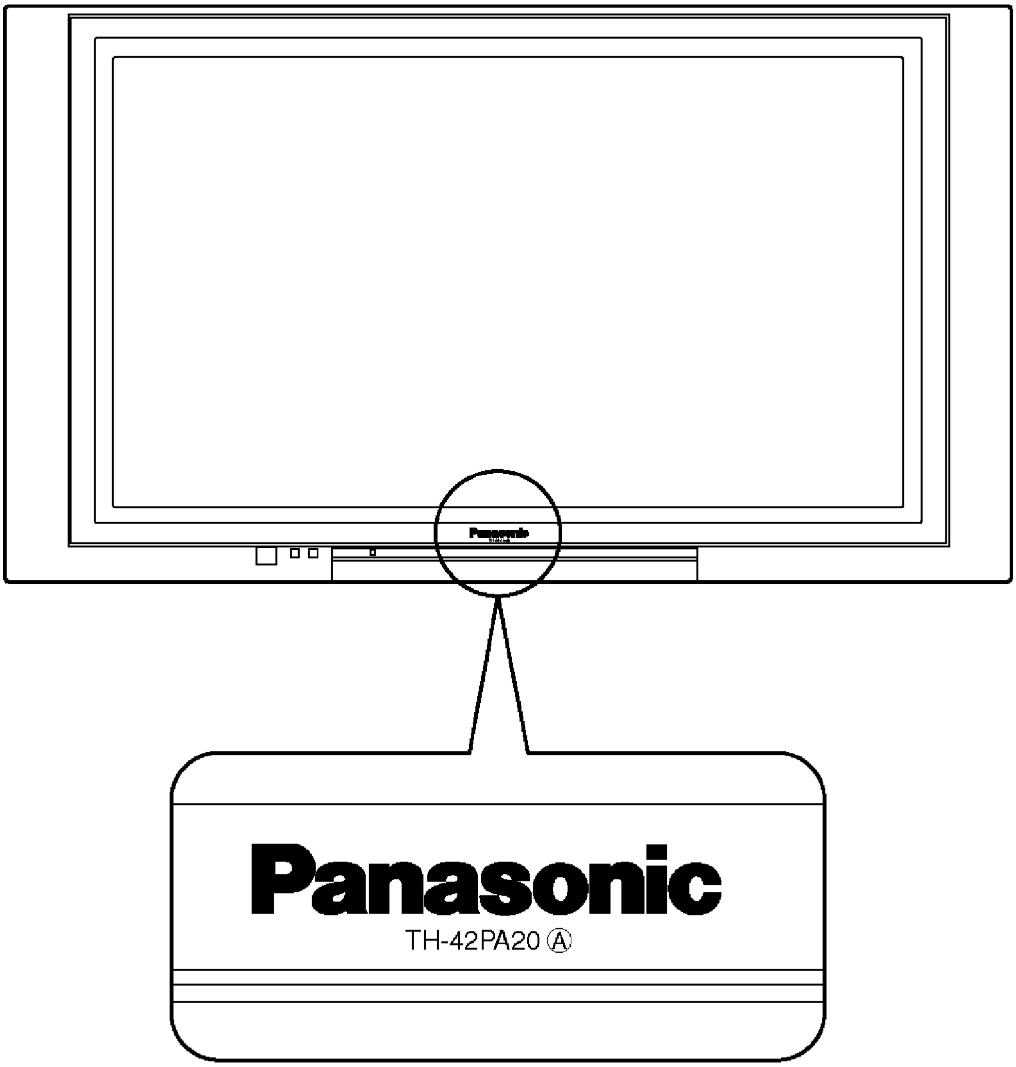
Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	TH-42PA20U/A		
R7297	ERJ3GEYJ220	ERJ3GEYJ181	M 180 OHM J 1/16W	
R7298,99	ERJ3GEYJ220	-----	M 22 OHM J 1/16W	
R7300	ERJ3GEYJ220	ERJ3GEYJ181	M 180 OHM J 1/16W	
R7301	ERJ3GEY0R00	ERJ3GEYJ221	M 220 OHM J 1/16W	
R7302	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7303	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7304	ERJ3GEY0R00	ERJ3GEYJ221	M 220 OHM J 1/16W	

1.2. Mechanical Replacement Parts List

Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	TH-42PA20U/A		
	MD42S06A1J	MD42S06B1J	PLASMA DISPLAY PANEL	
	TTEA0133	TTEA0185	ESCUTCHEON	

2. Note

1. **Plasma display panel is improved from TH-42PA20.**
2. **Model number is indicated in front is only “TH-42PA20 Ⓐ” only in front as shown in figure.**
3. **TH-42PA20 was discontinued and TH-42PA20 Ⓐ was introduced from MAR/2004.**



3. Conductor Views

3.1. C1-Board

3.2. C2-Board

4. Schematic Diagram

4.1. C1-Board Schematic Diagram

4.2. C2-Board Schematic Diagram

5. Schematic Diagram for printing with A4

6. Cover for printing with A4

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Service Manual

Progressive Plasma Television

TH-42PA20U-A

GP6DU Chassis

Simplified

Please file and use this manual together with the service manual for Model No. TH-42PA20U/P (Main), ORDER NO. ITD0306013C1.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

1 Difference point

1.1. Electrical Replacement Parts List

Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	**TH-42PA20U/A**		
RTL	TXN/D10QCS	**TZTNP01TTSU**	CIRCUIT BOARD D	
IC9702	C3EBJC000038	**TVRN207-1**	IC	
RTL	TNPA2869	**TNPA3083**	CIRCUIT BOARD C1	
C7103	TCUY1C105ZFN	-----	C 1UF, 16V	
C7106	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7111	F1K2A1040004	-----	C 0.1UF, 100V	
C7113	F1K2A1040004	**F1K2A474A006**	C 0.47UF 100V	
C7115	F1K2A1040004	**F1K2A474A006**	C 0.47UF 100V	
C7117	-----	**F1K2A474A006**	C 0.47UF 100V	
C7135	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7136	-----	**ECJ3XB0J106M**	C 10UF, M,6.3V	
C7137	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7138	-----	**ECJ3XB0J106M**	C 10UF, M,6.3V	
C7139	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7140	-----	**ECJ3XB0J106M**	C 10UF, M,6.3V	
C7147	TCUY1C105ZFN	-----	C 1UF, 16V	
C7148	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7149	TCUY1C105ZFN	-----	C 1UF, 16V	
C7150	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7151	TCUY1C105ZFN	-----	C 1UF, 16V	
C7152	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
CB1-B3	K1MN80B00004	**K1MN48A00002**	CONNECTOR	
FL7106	-----	**ELKE103FA**	NOISE FILTER	
L7106	ELKE103FA	-----	NOISE FILTER	
L7111-13	-----	**J0JHC0000096**	CHIP INDUCTOR	
R7102,03	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	

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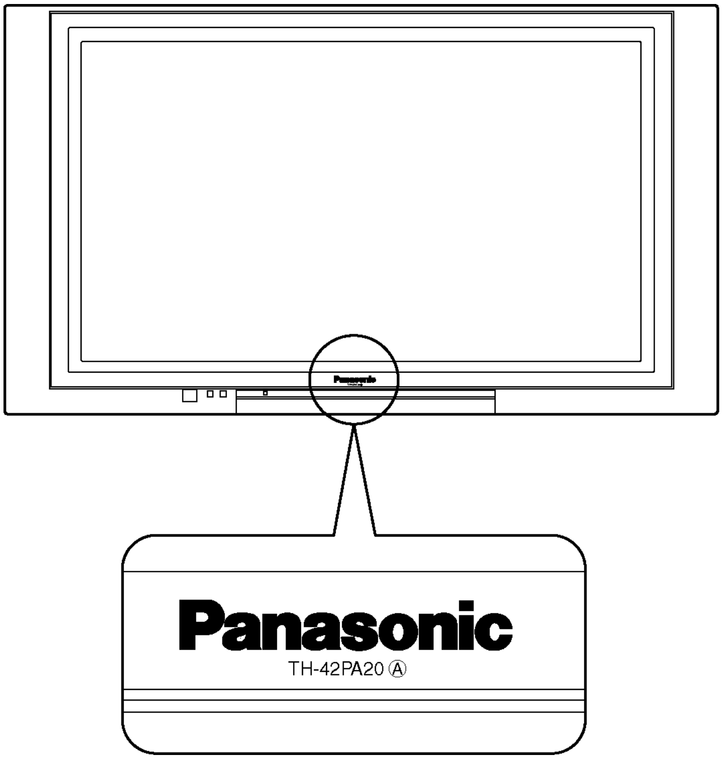
Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	**TH-42PA20U/A**		
R7105	ERJ6GEYJ102	-----	M 1KOHM J 1/10W	
R7106,07	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7110	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7112-16	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7117	ERJ14YJ220	**ERJ6GEYJ224**	M 220KOHM J 1/10W	
R7118	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7119	ERJ14YJ220	**ERJ6ENF1651**	M1.65KOHM 1/10W	
R7120	ERJ14YJ220	**ERJ6GEYJ102**	M 1KOHM J 1/10W	
R7121	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7125	-----	**ERJ6GEYJ102**	M 1KOHM J 1/10W	
R7137-41	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7162,63	ERJ3GEY0R00	**ERJ3GEYJ181**	M 180 OHM J 1/16W	
R7164,65	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7166,67	ERJ3GEYJ220	**ERJ3GEYJ151**	M 150 OHM J 1/16W	
R7168,69	ERJ3GEYJ220	-----	M 22 OHM J 1/16W	
R7172,73	ERJ3GEYJ121	-----	M 120 OHM J 1/16W	
R7175-77	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7190	ERJ6GEYJ224	-----	M 220KOHM J 1/10W	
RTL	TNPA2870	**TNPA3084**	CIRCUIT BOARD C2	
C7205	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7211	F1K2A1040004	**ECJ3XB2A474K**	C 0.47UF 6.3V	
C7213	F1K2A1040004	**F1K2A474A006**	C 0.47UF 100V	
C7215	-----	**F1K2A474A006**	C 0.47UF 100V	
C7217	F1K2A1040004	**F1K2A474A006**	C 0.47UF 100V	
C7219	F1K2A1040004	-----	C 0.1UF, 100V	
C7237	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7238	-----	**ECJ3XB0J106M**	C 10UF, M,6.3V	
C7239	-----	**TCUY1C105ZFN**	C 1UF, 16V	
C7240	-----	**ECJ3XB0J106M**	C 10UF, M,6.3V	
C7244	TCUY1C105ZFN	-----	C 1UF, 16V	
C7246	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7250	ECJ3XB0J106M	-----	C 10UF, M,6.3V	
C7406	TCUY1C105ZFN	-----	C 1UF, 16V	
CB4-B7	K1MN80B00004	**K1MN48A00002**	CONNECTOR	
FL7207-09	-----	**ELKE103FA**	NOISE FILTER	
L7207-09	ELKE103FA	-----	NOISE FILTER	
L7214-17	J0JHC0000096	-----	CHIP INDUCTOR	
R7202,03	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7205	ERJ6GEYJ102	-----	M 1KOHM J 1/10W	
R7206,07	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7210	-----	**ERJ14YJ220**	M 22 OHM J 1/4W	
R7212,13	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7216	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7217	ERJ14YJ220	**ERJ6GEYJ224**	M 220KOHM J 1/10W	
R7218	ERJ14YJ220	-----	M 22 OHM J 1/4W	
R7219	ERJ6GEYJ224	-----	M 220KOHM J 1/10W	
R7225	-----	**ERJ6GEYJ102**	M 1KOHM J 1/10W	
R7230	TAJAAH0470JV	**ERJ3GEY0R00**	M 0 OHM 1/16W	
R7232	TAJAAH0470JV	**ERJ3GEY0R00**	M 0 OHM 1/16W	
R7268,69	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7286,87	ERJ6GEY0R00	-----	M 0 OHM 1/10W	
R7289,90	ERJ3GEYJ181	**TAJAAH0101JV**	M 100 OHM J 1/16W	
R7291,92	ERJ3GEYJ181	-----	M 180 OHM J 1/16W	
R7293	ERJ3GEYJ121	**ERJ3GEYJ151**	M 150 OHM J 1/16W	
R7294,95	ERJ3GEYJ121	-----	M 120 OHM J 1/16W	
R7296	ERJ3GEYJ121	**ERJ3GEYJ151**	M 150 OHM J 1/16W	
R7297	ERJ3GEYJ220	**ERJ3GEYJ181**	M 180 OHM J 1/16W	
R7298,99	ERJ3GEYJ220	-----	M 22 OHM J 1/16W	
R7300	ERJ3GEYJ220	**ERJ3GEYJ181**	M 180 OHM J 1/16W	
R7301	ERJ3GEY0R00	**ERJ3GEYJ221**	M 220 OHM J 1/16W	
R7302	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7303	ERJ3GEY0R00	-----	M 0 OHM 1/16W	
R7304	ERJ3GEY0R00	**ERJ3GEYJ221**	M 220 OHM J 1/16W	

1.2. Mechanical Replacement Parts List

Ref.No.	Part No.		Part Name & Description	Remarks
	TH-42PA20U/P	**TH-42PA20U/A**		
	MD42S06A1J	**MD42S06B1J**	PLASMA DISPLAY PANEL	
	TTEA0133	**TTEA0185**	ESCUTCHEON	

2 Note

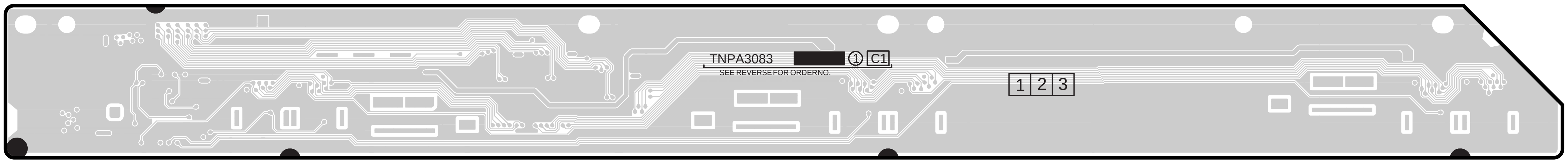
1. Plasma display panel is improved from TH-42PA20.
2. Model number is indicated in front is only “TH-42PA20 Ⓐ” only in front as shown in figure.
3. TH-42PA20 was discontinued and TH-42PA20 Ⓐ was introduced from MAR/2004.



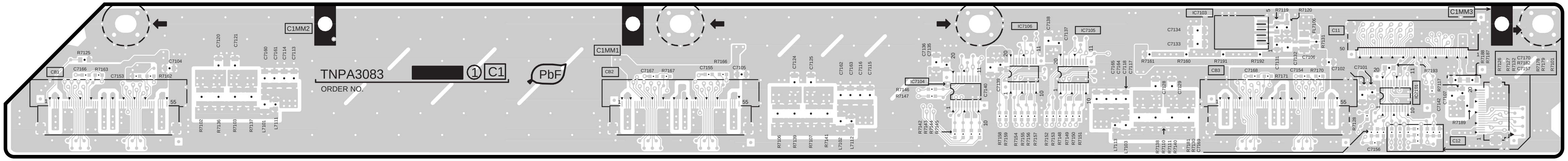
Parts Location

C1-BOARD			
IC			
IC7101	H-2		
IC7103	G-2		
IC7104	E-2		
IC7105	F-2		
IC7106	F-2		

C1-BOARD (FOIL SIDE)
TNPA3083


TNPA3083
① C1
SEE REVERSE FOR ORDER NO.
1 2 3

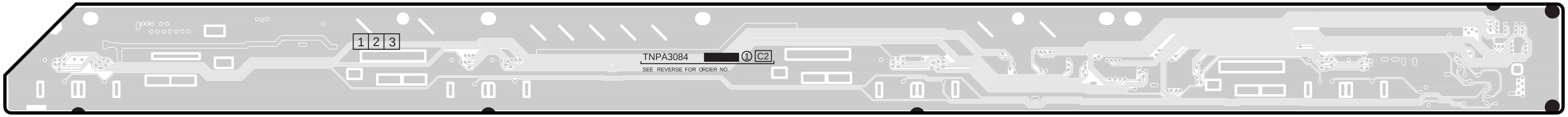
C1-BOARD (COMPONENT SIDE)
TNPA3083


C1MM2
C1MM1
C1MM3
TNPA3083
ORDER NO.
① C1
PbF
CB1
CB2
CB3
C11
C12
IC7103
IC7104
IC7105
IC7106

Parts Location

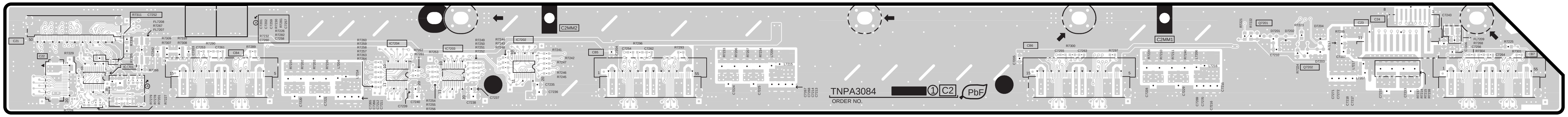
C2-BOARD			
IC		**TRANSISTOR**	
IC7201	A-2	Q7201	H-2
IC7202	D-2	Q7202	H-2
IC7203	C-2		
IC7204	C-2		

C2-BOARD (FOIL SIDE)
TNPA3084



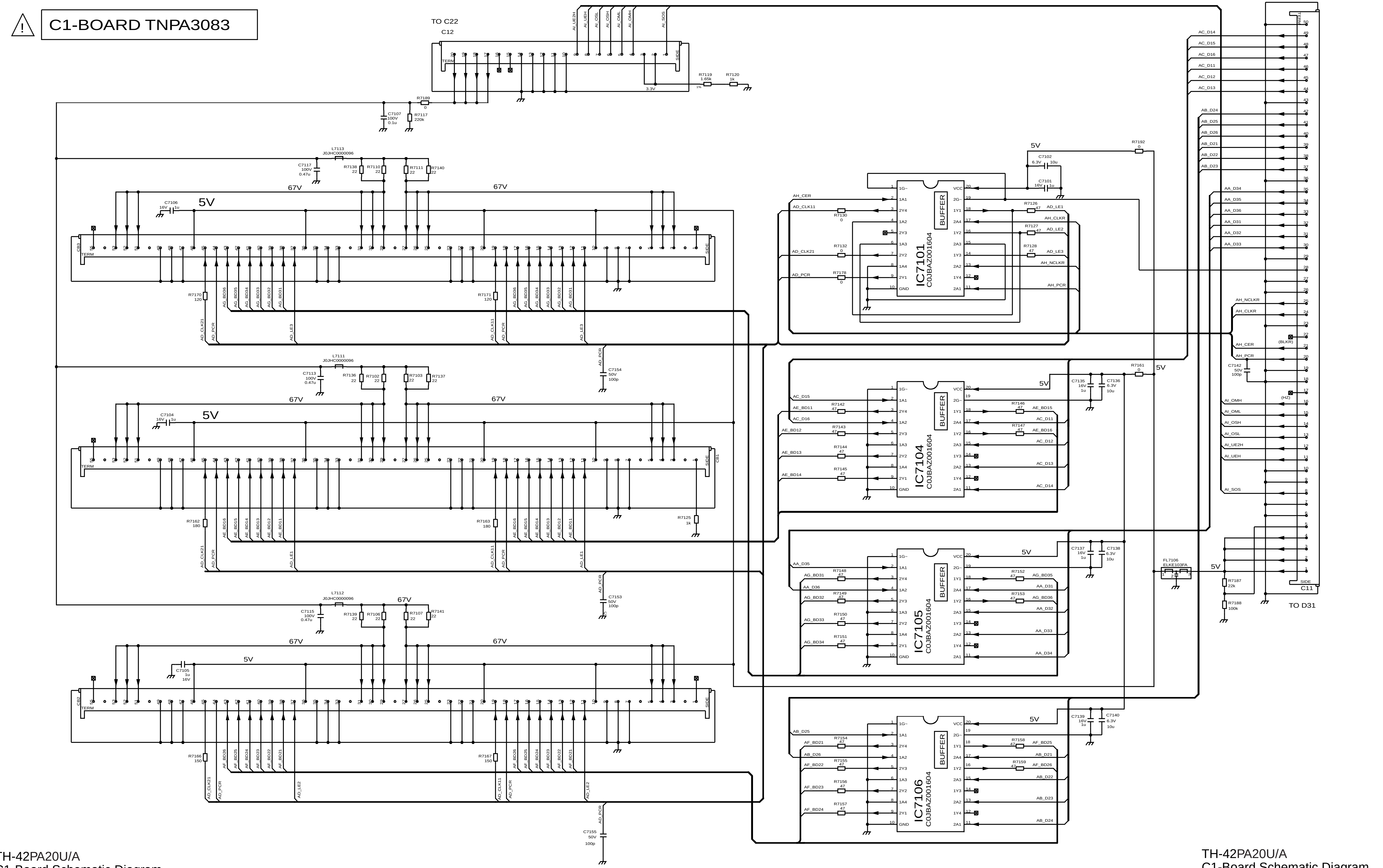
1
2
3
TNPA3084
①
C2
SEE REVERSE FOR ORDER NO.

C2-BOARD (COMPONENT SIDE)
TNPA3084



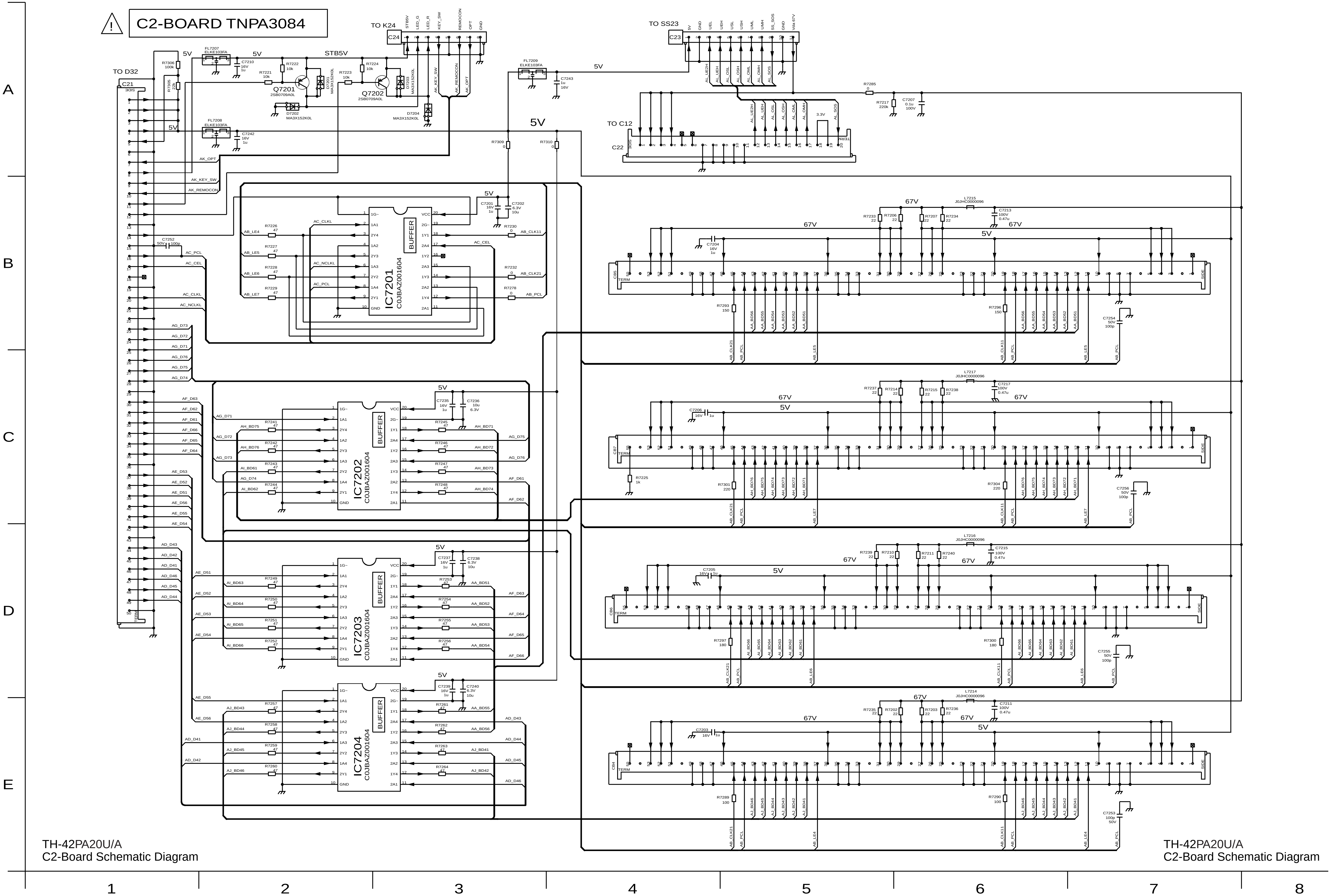
IC7204
IC7203
IC7202
C2MM2
C2MM1
Q7201
Q7202
TNPA3084
①
C2
PbF
ORDER NO.

C1-BOARD TNPA3083



TO C22
C12
TERM
SIDE
R7119 1.65k 1%
R7120 1k
3.3V
R7189 0
C7107 100V 0.1u
R7117 220k
L7113 J0JHC0000096
C7117 100V 0.47u
R7138 22
R7110 22
R7111 22
R7140 22
67V
5V
C7106 16V 1u
CB3
R7170 120
R7171 120
AD_CLK21
AD_PCR
AD_LE3
AD_CLK11
AG_BD36
AG_BD35
AG_BD34
AG_BD33
AG_BD32
AG_BD31
C7154 50V 100p
L7111 J0JHC0000096
C7113 100V 0.47u
R7136 22
R7102 22
R7103 22
R7137 22
C7104 16V 1u
CB1
R7162 180
R7163 180
R7125 1k
AE_BD16
AE_BD15
AE_BD14
AE_BD13
AE_BD12
AE_BD11
AD_LE1
C7153 50V 100p
L7112 J0JHC0000096
C7115 100V 0.47u
R7139 22
R7106 22
R7107 22
R7141 22
C7105 1u 16V
CB2
R7166 150
R7167 150
AF_BD26
AF_BD25
AF_BD24
AF_BD23
AF_BD22
AF_BD21
AD_LE2
C7155 50V 100p
IC7101
C0JBAZ001604
BUFFER
C7102 6.3V 10u
C7101 16V 1u
R7192 0
AH_CER
AD_CLK11
AD_CLK21
AD_PCR
R7130 0
R7132 0
R7178 0
R7126 47
R7127 47
R7128 47
AD_LE1
AH_CLKR
AD_LE2
AD_LE3
AH_NCLKR
AH_PCR
1G~
1A1
2Y4
1A2
2Y3
1A3
2Y2
1A4
2Y1
GND
VCC
2G~
1Y1
2A4
1Y2
2A3
1Y3
2A2
1Y4
2A1
IC7104
C7135 16V 1u
C7136 6.3V 10u
R7161 0
AC_D15
AE_BD11
AC_D16
AE_BD12
AE_BD13
AE_BD14
R7142 47
R7143 47
R7144 47
R7145 47
R7146 47
R7147 47
AE_BD15
AC_D11
AE_BD16
AC_D12
AC_D13
AC_D14
IC7105
C7137 16V 1u
C7138 6.3V 10u
AA_D35
AG_BD31
AA_D36
AG_BD32
AG_BD33
AG_BD34
R7148 47
R7149 47
R7150 47
R7151 47
R7152 47
R7153 47
AG_BD35
AA_D31
AG_BD36
AA_D32
AA_D33
AA_D34
IC7106
C7139 16V 1u
C7140 6.3V 10u
AB_D25
AF_BD21
AB_D26
AF_BD22
AF_BD23
AF_BD24
R7154 47
R7155 47
R7156 47
R7157 47
R7158 47
R7159 47
AF_BD25
AB_D21
AF_BD26
AB_D22
AB_D23
AB_D24
FL7106 ELKE103FA
R7187 22k
R7188 100k
C7142 50V 100p
AC_D14
AC_D15
AC_D16
AC_D11
AC_D12
AC_D13
AB_D24
AB_D25
AB_D26
AB_D21
AB_D22
AB_D23
AA_D34
AA_D35
AA_D36
AA_D31
AA_D32
AA_D33
AH_NCLKR
AH_CLKR
(BLKR)
AH_CER
AH_PCR
(HZ)
AI_OMH
AI_OML
AI_OSH
AI_OSL
AI_UE2H
AI_UEH
AI_SOS
C11
TO D31
A
B
C
D
E
1
2
3
4
5
6
7
8

C2-BOARD TNPA3084

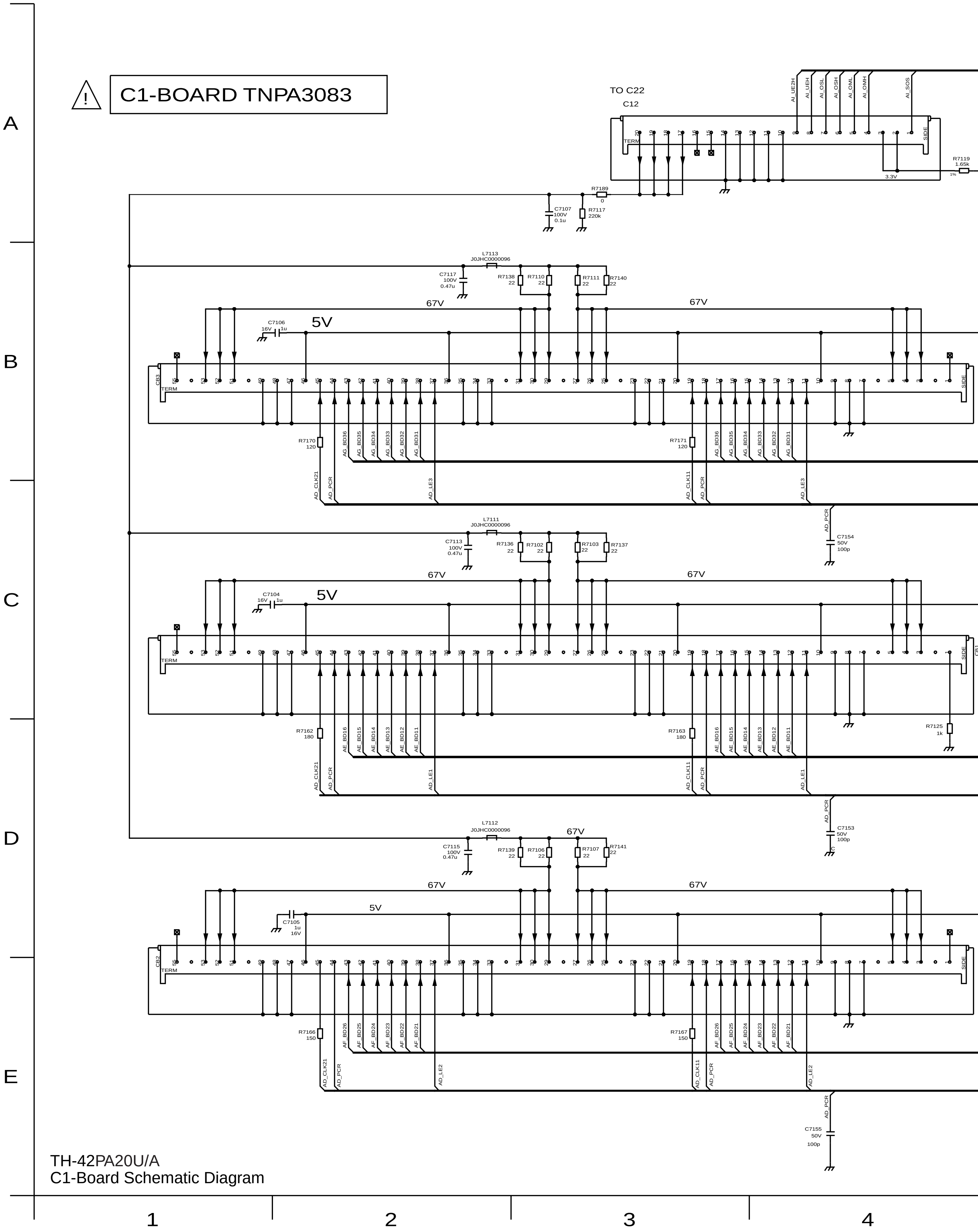

TO K24
C24
STB5V
LED_G
LED_R
KEY_SW
REMOCON
OPT
GND
TO SS23
C23
5V
GND
UEL
UEH
USL
USH
UML
UMH
SS_SOS
GND
Vda 67V
TO D32
C21
TO C12
C22
FL7207
ELKE103FA
FL7208
ELKE103FA
FL7209
ELKE103FA
Q7201
2SB0709A0L
Q7202
2SB0709A0L
D7201
D7202
D7203
D7204
MA3X152K0L
IC7201
C0JBAZ001604
IC7202
C0JBAZ001604
IC7203
C0JBAZ001604
IC7204
C0JBAZ001604
BUFFER
AK_OPT
AK_KEY_SW
AK_REMOCON
AC_CLKL
AC_NCLKL
AC_PCL
AC_CEL
AB_CLK11
AB_CLK21
AB_PCL
AB_LE4
AB_LE5
AB_LE6
AB_LE7
5V
67V
3.3V
L7214
L7215
L7216
L7217
J0JHC0000096
CB4
CB5
CB6
CB7
TERM
SIDE
A
B
C
D
E
1
2
3
4
5
6
7
8

TH-42PA20U/A
C2-Board Schematic Diagram

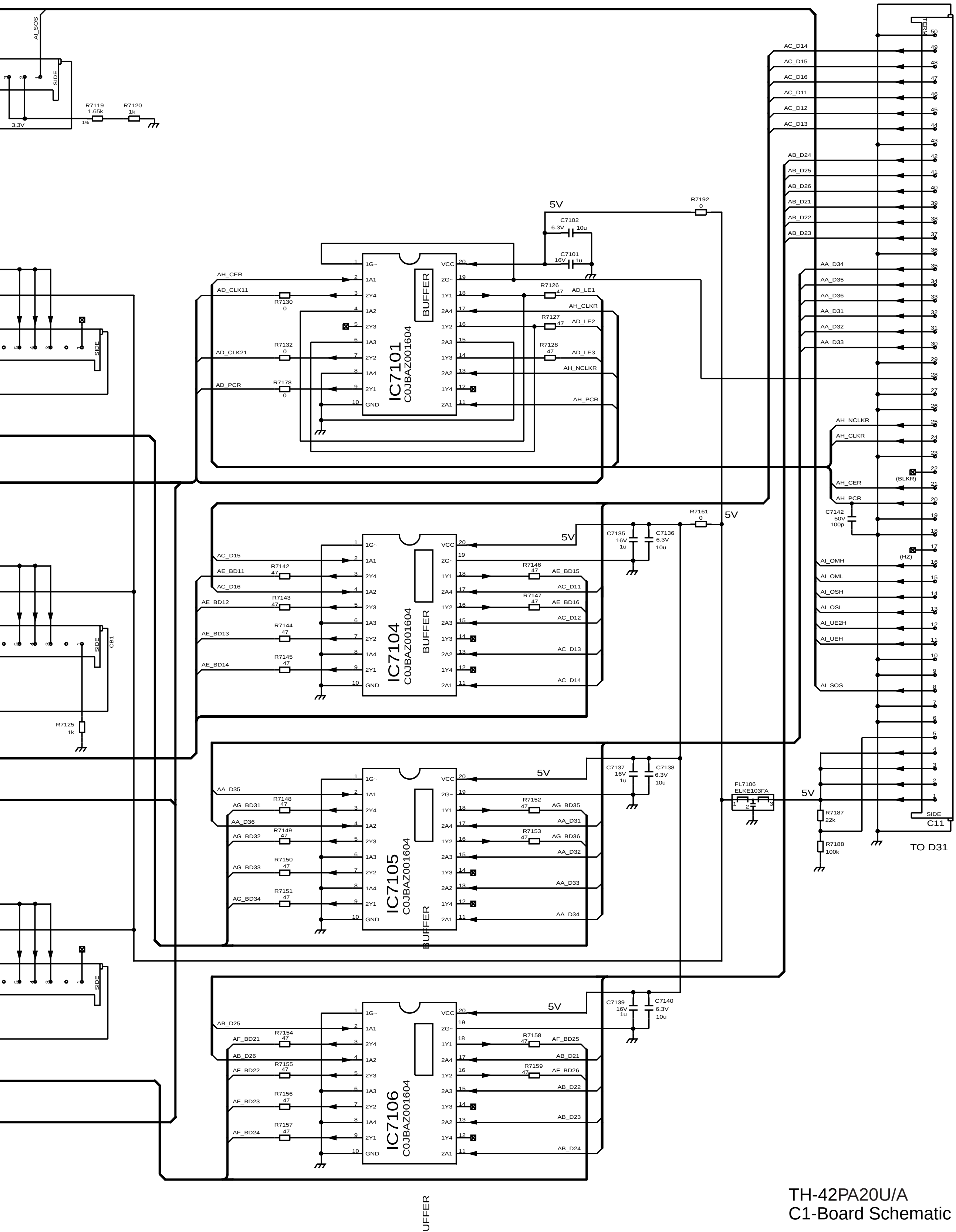
TH-42PA20U/A
C2-Board Schematic Diagram

4 Schematic Diagram

4.1. C1-Board Schematic Diagram

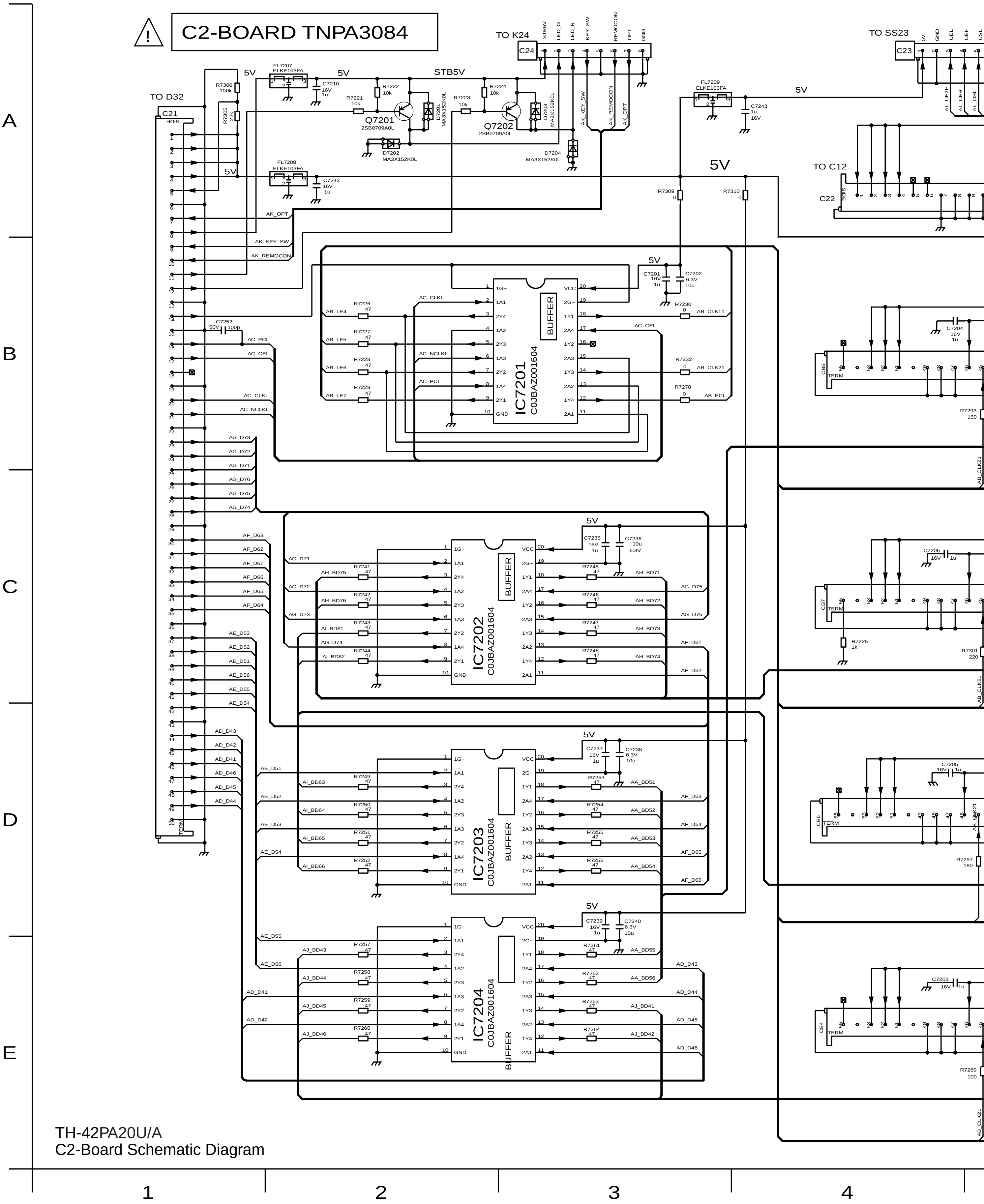

C1-BOARD TNPA3083
TO C22
C12
AI_UE2H
AI_UEH
AI_OSL
AI_OSH
AI_OML
AI_OMH
AI_SOS
TERM
SIDE
R7119 1.65k
3.3V
R7189 0
C7107 100V 0.1u
R7117 220k
L7113 J0JHC0000096
C7117 100V 0.47u
R7138 22
R7110 22
R7111 22
R7140 22
67V
C7106 16V 1u
5V
CB3
R7170 120
R7171 120
AG_BD36
AG_BD35
AG_BD34
AG_BD33
AG_BD32
AG_BD31
AD_CLK21
AD_CLK11
AD_PCR
AD_LE3
C7154 50V 100p
L7111 J0JHC0000096
C7113 100V 0.47u
R7136 22
R7102 22
R7103 22
R7137 22
C7104 16V 1u
R7162 180
R7163 180
R7125 1k
AE_BD16
AE_BD15
AE_BD14
AE_BD13
AE_BD12
AE_BD11
AD_LE1
C7153 50V 100p
L7112 J0JHC0000096
C7115 100V 0.47u
R7139 22
R7106 22
R7107 22
R7141 22
C7105 1u 16V
CB2
R7166 150
R7167 150
AF_BD26
AF_BD25
AF_BD24
AF_BD23
AF_BD22
AF_BD21
AD_LE2
C7155 50V 100p
A
B
C
D
E
1
2
3
4

TH-42PA20U/A
C1-Board Schematic Diagram

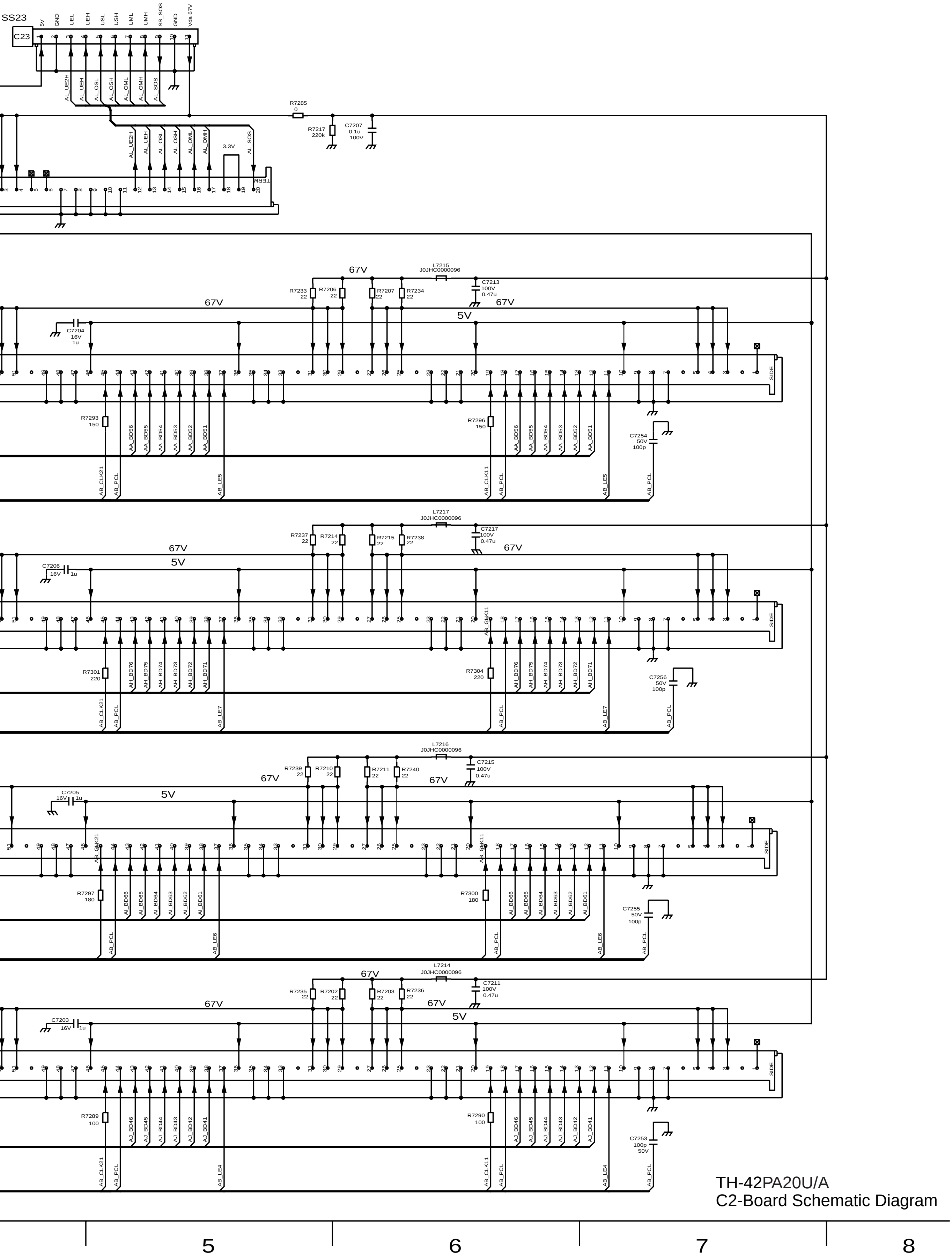

AI_SOS
SIDE
3.3V
R7119
1.65k
1%
R7120
1k
CB1
R7125
1k
IC7101
C0JBAZ001604
BUFFER
IC7104
C0JBAZ001604
BUFFER
IC7105
C0JBAZ001604
BUFFER
IC7106
C0JBAZ001604
BUFFER
1G~
1A1
2Y4
1A2
2Y3
1A3
2Y2
1A4
2Y1
GND
VCC
2G~
1Y1
2A4
1Y2
2A3
1Y3
2A2
1Y4
2A1
AH_CER
AD_CLK11
AD_CLK21
AD_PCR
R7130
R7132
R7178
0
R7126
R7127
R7128
47
AD_LE1
AH_CLKR
AD_LE2
AD_LE3
AH_NCLKR
AH_PCR
5V
C7102
6.3V
10u
C7101
16V
1u
R7192
0
AC_D15
AE_BD11
AC_D16
AE_BD12
AE_BD13
AE_BD14
R7142
R7143
R7144
R7145
R7146
R7147
AE_BD15
AC_D11
AE_BD16
AC_D12
AC_D13
AC_D14
C7135
16V
1u
C7136
6.3V
10u
R7161
0
AA_D35
AG_BD31
AA_D36
AG_BD32
AG_BD33
AG_BD34
R7148
R7149
R7150
R7151
R7152
R7153
AG_BD35
AA_D31
AG_BD36
AA_D32
AA_D33
AA_D34
C7137
16V
1u
C7138
6.3V
10u
AB_D25
AF_BD21
AB_D26
AF_BD22
AF_BD23
AF_BD24
R7154
R7155
R7156
R7157
R7158
R7159
AF_BD25
AB_D21
AF_BD26
AB_D22
AB_D23
AB_D24
C7139
16V
1u
C7140
6.3V
10u
AC_D14
AC_D15
AC_D16
AC_D11
AC_D12
AC_D13
AB_D24
AB_D25
AB_D26
AB_D21
AB_D22
AB_D23
AA_D34
AA_D35
AA_D36
AA_D31
AA_D32
AA_D33
AH_NCLKR
AH_CLKR
AH_CER
AH_PCR
(BLKR)
C7142
50V
100p
(HZ)
AI_OMH
AI_OML
AI_OSH
AI_OSL
AI_UE2H
AI_UEH
AI_SOS
FL7106
ELKE103FA
R7187
22k
R7188
100k
TERM
SIDE
C11
TO D31
5
6
7
8

TH-42PA20U/A
C1-Board Schematic Diagram

4.2. C2-Board Schematic Diagram


C2-BOARD TNPA3084
TO D32
C21
TO K24
C24
STB5V
LED_G
LED_R
KEY_SW
REMOCON
OPT
GND
TO SS23
C23
5V
UEL
UEH
USL
TO C12
C22
FL7207 ELKE103FA
FL7208 ELKE103FA
FL7209 ELKE103FA
Q7201 2SB0709A0L
Q7202 2SB0709A0L
D7201 MA3X152K0L
D7202 MA3X152K0L
D7203 MA3X152K0L
D7204 MA3X152K0L
R7306 100k
R7305 22k
R7222 10k
R7221 10k
R7224 10k
R7223 10k
C7210 16V 1u
C7242 16V 1u
C7243 1u 16V
R7309 0
R7310 0
C7252 50V 100p
AK_OPT
AK_KEY_SW
AK_REMOCON
AC_PCL
AC_CEL
AC_CLKL
AC_NCLKL
IC7201 C0JBAZ001604 BUFFER
IC7202 C0JBAZ001604 BUFFER
IC7203 C0JBAZ001604 BUFFER
IC7204 C0JBAZ001604 BUFFER
C7201 16V 1u
C7202 6.3V 10u
C7235 16V 1u
C7236 10u 6.3V
C7237 16V 1u
C7238 6.3V 10u
C7239 16V 1u
C7240 6.3V 10u
AB_LE4
AB_LE5
AB_LE6
AB_LE7
AB_CLK11
AB_CLK21
AB_PCL
AG_D73
AG_D72
AG_D71
AG_D76
AG_D75
AG_D74
AF_D63
AF_D62
AF_D61
AF_D66
AF_D65
AF_D64
AE_D53
AE_D52
AE_D51
AE_D56
AE_D55
AE_D54
AD_D43
AD_D42
AD_D41
AD_D46
AD_D45
AD_D44
AH_BD71
AH_BD72
AH_BD73
AH_BD74
AH_BD75
AH_BD76
AI_BD61
AI_BD62
AI_BD63
AI_BD64
AI_BD65
AI_BD66
AA_BD51
AA_BD52
AA_BD53
AA_BD54
AA_BD55
AA_BD56
AJ_BD41
AJ_BD42
AJ_BD43
AJ_BD44
AJ_BD45
AJ_BD46
CB4
CB5
CB6
CB7
TERM
C7203 16V 1u
C7204 16V 1u
C7205 16V 1u
C7206 16V 1u
R7225 1k
R7289 100
R7293 150
R7297 180
R7301 220
AB_CLK21
A
B
C
D
E
1
2
3
4

TH-42PA20U/A
C2-Board Schematic Diagram


SS23
C23
5V
GND
UEL
UEH
USL
USH
UML
UMH
SS_SOS
GND
Vda 67V
AL_UE2H
AL_UEH
AL_OSL
AL_OSH
AL_OML
AL_OMH
AL_SOS
R7285
0
R7217
220k
C7207
0.1u
100V
3.3V
TERM
67V
5V
L7215
J0JHC0000096
C7213
100V
0.47u
R7233
22
R7206
22
R7207
22
R7234
22
C7204
16V
1u
SIDE
R7293
150
R7296
150
AA_BD56
AA_BD55
AA_BD54
AA_BD53
AA_BD52
AA_BD51
C7254
50V
100p
AB_CLK21
AB_PCL
AB_LE5
AB_CLK11
L7217
J0JHC0000096
C7217
100V
0.47u
R7237
22
R7214
22
R7215
22
R7238
22
C7206
16V
1u
R7301
220
R7304
220
AH_BD76
AH_BD75
AH_BD74
AH_BD73
AH_BD72
AH_BD71
C7256
50V
100p
AB_LE7
L7216
J0JHC0000096
C7215
100V
0.47u
R7239
22
R7210
22
R7211
22
R7240
22
C7205
16V
1u
R7297
180
R7300
180
AI_BD66
AI_BD65
AI_BD64
AI_BD63
AI_BD62
AI_BD61
C7255
50V
100p
AB_LE6
L7214
J0JHC0000096
C7211
100V
0.47u
R7235
22
R7202
22
R7203
22
R7236
22
C7203
16V
1u
R7289
100
R7290
100
AJ_BD46
AJ_BD45
AJ_BD44
AJ_BD43
AJ_BD42
AJ_BD41
C7253
100p
50V
AB_LE4
5
6
7
8

TH-42PA20U/A
C2-Board Schematic Diagram

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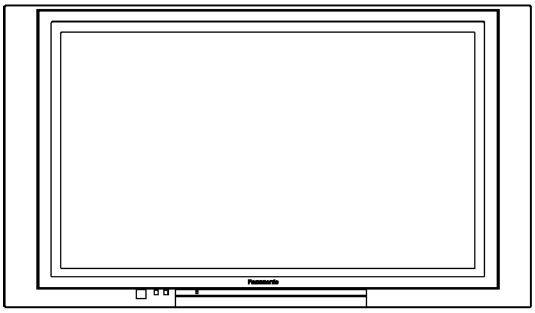
B19 Canada: B07

Service Manual

Progressive Plasma Television

TH-42PA20U-P
GP6DU Chassis



SPECIFICATIONS

Specifications

wer Source	AC 120 V, 50/60 Hz	
wer Consumption	Maximum :425 W	
	Stand-by condition :0.8 W	
ısma Display panel	Drive method :AC type 42-inch, 16 :9 aspect ratio	
reen Size	36.22 “ (920 mm) (W) × 20.39 “ (518 mm) (H) × 41.57 “ (1056 mm) (diagonal)	
nensions × H × D)	46.06 “ (1170mm) “ 29.91 “ (658 mm) × 3.90 “ (99 mm)	
ıss (Weight)	77.2 lb.(35.0 kg)Net	
annel Capability-181	VHF-12 :UHF-56 :Cable-125	
und		
Speaker	Woofer Φ 1.57 “ (40 mm) × 4 , Tweeter Φ 1.38 “ (35mm)	
Audio Output	16 W [8 W +8 W] (10 % THD)	
Headphone	M3 (3.5 mm) Jack × 1	
ATURES	Two screen display fuctions	3D Y/C FILTER
	BBE VIVA	LINEAR PIP
	CLOSED CAPTION	V-Chip
cessories Supplied	Remote control Transmitter	EUR7603ZC0
	AA Battery × 2	Ferrite cores (large × 5, small × 5)
	AC Cord	F type Antenna Adaptor (3C-2V × 2, 5C-2V × 2)
	Pedestal	Fixing band
ıerating Conditions	Temperature : 34 °F - 104 °F (0° - 40°C)	
	Humidity : 20 % - 80 % (non-condensing)	

nnection Terminals	RGB input	D-SUB 15pin	R, G, B /0.7 Vp-p (75 Ω) HD, VD /1.0 -5.0 Vp-p (high impedance)
	AV INPUT 1-3	VIDEO (Phono Jack Type)	1.0 Vp-p (75 Ω)
		S-VIDEO (Mini DIN 4-pin)	Y :1.0 Vp-p (75 Ω), C : 0.286 Vp (75 Ω)
		AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
	AV PROG.OUT	VIDEO (Phono Jack Type)	1.0 Vp-p (75 Ω)
		AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
	TO AUDIO AMP	AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
	COMPONENT VIDEO INPUT1-2	Y	1.0 Vp-p (including synchroniza
		PB /PR	± 0.35 Vp-p
		AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
	DIGITAL IN INPUT	DVI 1.0	24 pin
		AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms

:

Panasonic®

1. Applicable signals

VIDEO input

	signal name	horizontal frequency(kHz)	vertical frequency(Hz)
1	NTSC	15.73	59.94

Applicable input signals (✻ mark)

	signal name	horizontal frequency(kHz)	vertical frequency(Hz)	COMPONENT	PC	DVI
1	525 (480) /60i	15.73	59.94	✻	✻	
2	525 (480) /60p	31.47	59.94	✻	✻	✻
3	1,125 (1,080) /60i	33.75	59.94	✻	✻	✻
4	640 × 400 @70	31.47	70.00		✻	
5	640 × 480 @60	31.47	59.94		✻	
6	Macintosh13” (640 × 480)	35.00	66.67		✻	
7	640 × 480 @75	37.50	75.00		✻	
8	852 × 480 @60	31.50	60.00		✻	
9	800 × 600 @60	37.88	60.32		✻	
10	800 × 600 @75	46.88	75.00		✻	
11	800 × 600 @85	53.67	85.06		✻	
12	Macintosh16” (832 × 624)	49.73	74.55		✻	
13	1,024 × 768 @60	48.36	60.00		✻	
14	1,024 × 768 @70	56.48	70.07		✻	
15	1,024 × 768 @75	60.02	75.03		✻	
16	1,024 × 768 @85	68.68	85.00		✻	
17	Macintosh21” (1,152 × 870)	68.68	75.06		✻	
18	1,280 × 1,024 @60	63.98	60.02		✻	
19	1,280 × 1,024 @75	79.98	75.03		✻	
20	1,280 × 1,024 @85	91.15	85.02		✻	
21	1,600 × 1,200 @60	75.00	60.00		✻	

Note: Signals without above specification may not be displayed properly.

2. Safety Precautions

2.1. General Guidelines

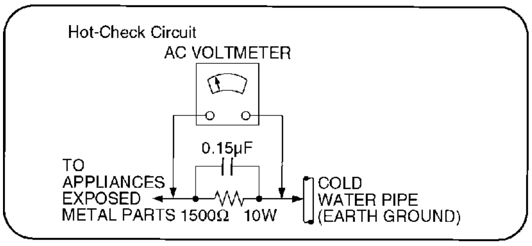
1. **When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
2. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**
3. **After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.**

2.1.1. Leakage Current Cold Check

1. **Unplug the AC cord and connect a jumper between the two prongs on the plug.**
2. **Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1MΩ and 5.2MΩ. / When the**

exposed metal does not have a return path to the chassis, the reading must be∞.

Figure 1



2.1.2. Leakage Current Hot Check (See Figure 1 .)

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**
2. **Connect a 1.5k Ω , 10 watts resistor, in parallel with a 0.15 μ F capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1 .**
3. **Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.**
4. **Check each exposed metallic part, and measure the voltage at each point.**
5. **Reverse the AC plug in the AC outlet and repeat each of the above measurements.**
6. **The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outsideof the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.**

3. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or**

semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparableconductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

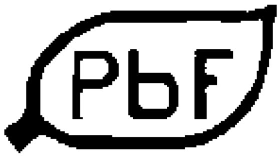
   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient todamage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4. About lead free solder (PbF)

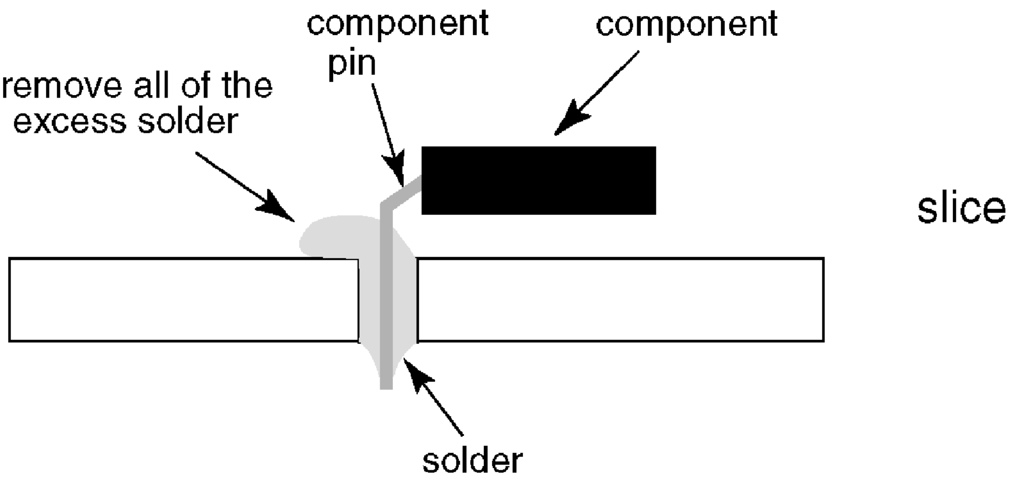
Note: Lead is listed as (Pb) in the periodic table of elements.
In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.
The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.
This model uses Pb Free solder in it's manufacture due to environmental conservation issues.
For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol



stamped on the back of PCB.

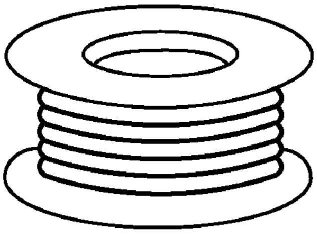
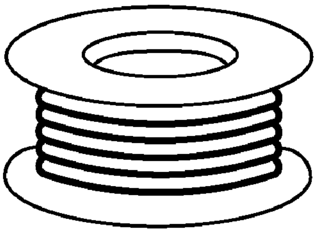
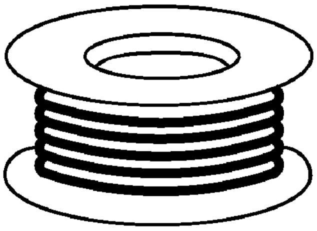
Caution

- **Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).**
- **Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).**
  If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- **After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)**

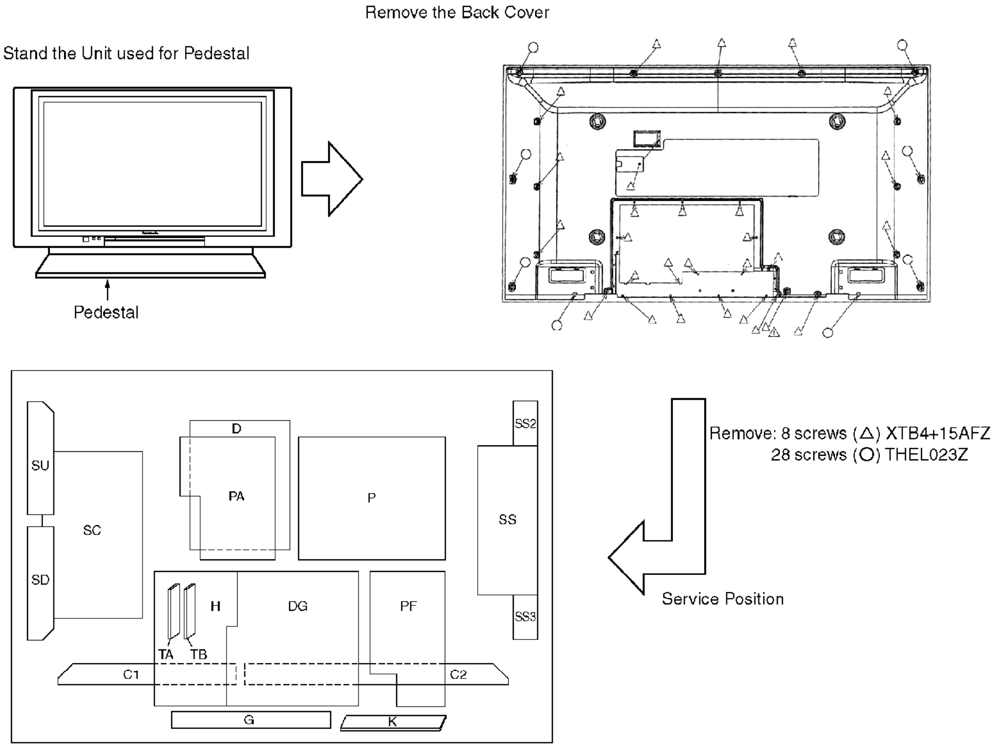

component
pin
component
remove all of the
excess solder
slice
solder

Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also beused.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

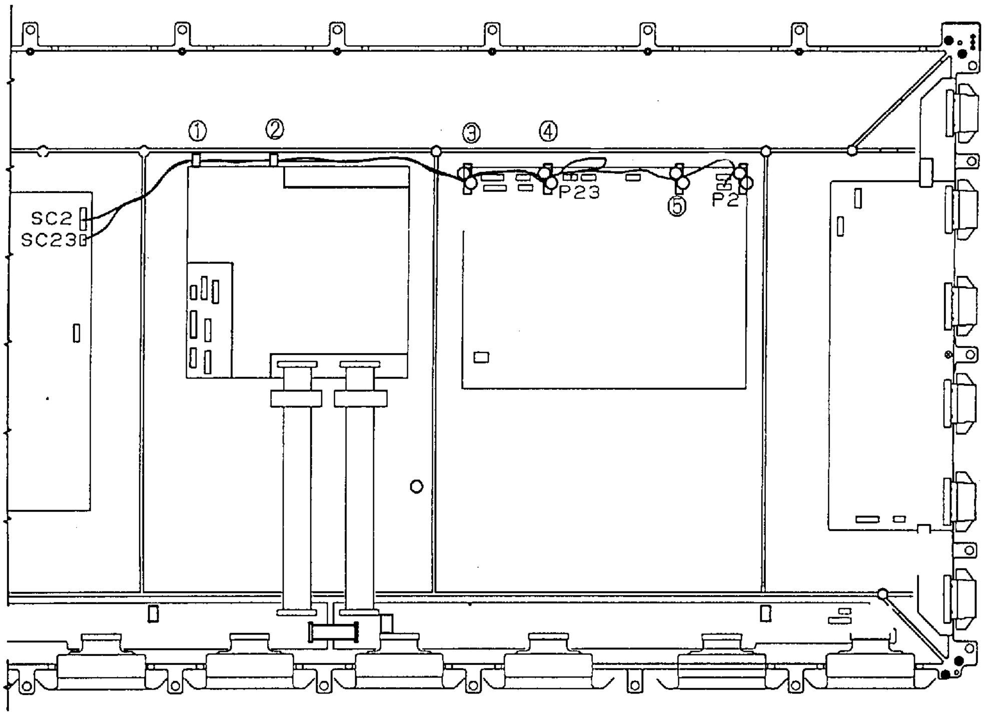
5. Service Hint


Stand the Unit used for Pedestal
Pedestal
Remove the Back Cover
Remove: 8 screws (△) XTB4+15AFZ
28 screws (○) THEL023Z
Service Position
SU
SC
SD
D
PA
P
SS2
SS
SS3
H
DG
PF
TA
TB
C1
C2
G
K

Board Name	Function	Board Name	Function
C1	DATA DRIVER (RIGHT)	PF	LINE FILTER
C2	DATA DRIVER (LEFT)	SC	SCAN DRIVE
D	DIGTAL SIGINAL PROCESS	SD	SCAN OUT (DOWN)
DG	DIGTAL CORE MICOM	SS	SUSTAIN DRIVE
G	FRONT TERMINAL, SWITCH	SS2	SUSTAIN CONNECTION (UP)
H	REAE TERMINAL	SS3	SUSTAIN CONNECTION (DOWN)
K	LED, REMOTE, POWER SWITCH	SU	SCAN OUT (UP)
P	POWER SUPPLY	TA	MAIN TUNER
PA	DC/DC, AUDIO	TB	SUB TUNER

6. Location of Lead Wiring

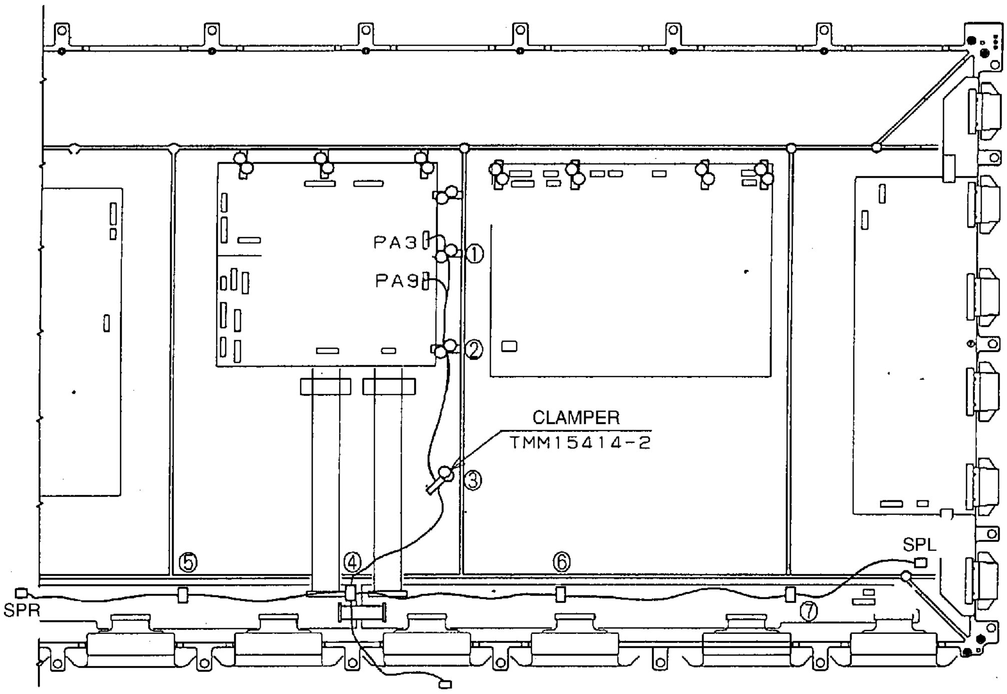
6.1. Lead of Wiring (1)


①
②
③
④
SC2
SC23
P23
⑤
P2

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥
SC2 —— P2	○	○	○	○	○	
SC23 —— P23	○	○	○	○		
——						

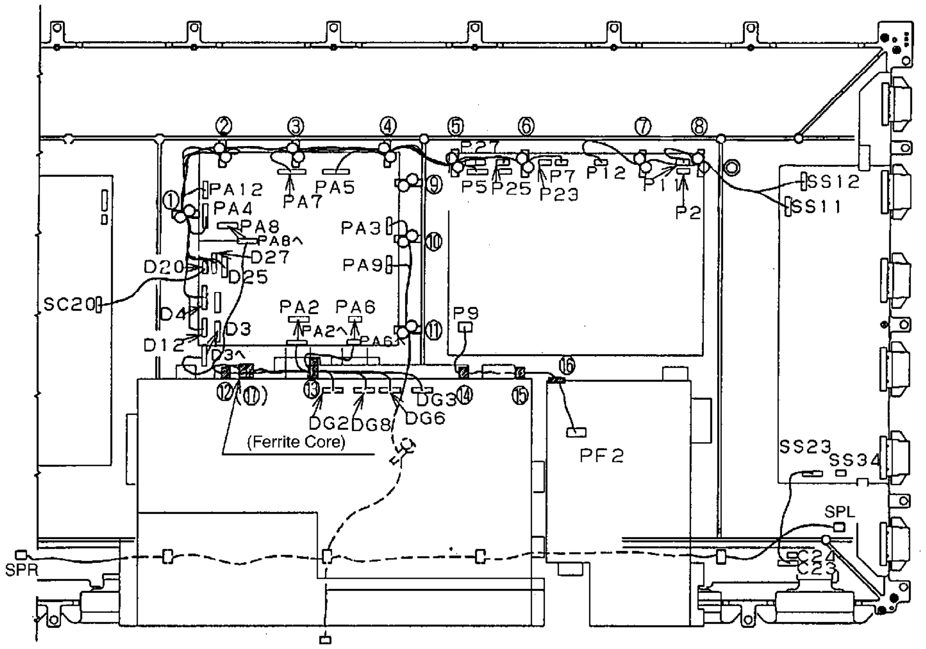
Connector Connection
P2、P23

6.2. Lead of Wiring (2)


PA3
PA9
①
②
CLAMPER
TMM15414-2
③
④
⑤
⑥
SPL
SPR
⑦

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥	⑦		
PA3 —— SPR	○	○	○	○	○				
PA3 —— SPL	○	○	○	○		○	○		
PA9 —— K9		○	○	○					

6.3. Lead of Wiring (3)

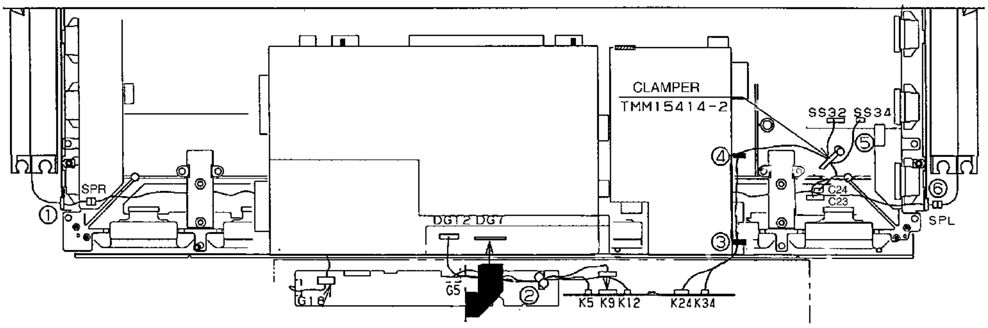

①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
PA12
PA4
PA8
PA8^
D27
D20
D25
SC20
D4
D12
D3
D3^
PA7
PA5
PA3
PA9
PA2
PA6
PA2^
PA6^
DG2
DG8
DG6
DG3
(Ferrite Core)
P27
P5
P25
P7
P23
P12
P11
P2
SS12
SS11
P9
PF2
SS23
SS34
SPL
C23
SPR

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰
SC20 —— D20																	
D12 —— PA12	○																
D4 —— PA4	●	●															
D25 —— P25	○	○	○	○	○												
D27 —— P27	○	○	○	○	○												
PA5 —— P5				○	○												
SS11 —— P11								○									
SS12 —— P12							○	○									
PA7 —— P7			○	○	○	○											
PF2 —— P9													○	○		○	
DG8 —— PA8												○	○				
SS23 —— C23																	
DG2 —— PA2													○				
DG6 —— PA6													○				
DG3 —— D3													○				○

Connector Connection
P2, P5, P11, P12, P23, P25
P27, P7, D20, D12, D4
D25, D27, D3
PA8, PA2, PA6, PA7, C23

● Wind up second times

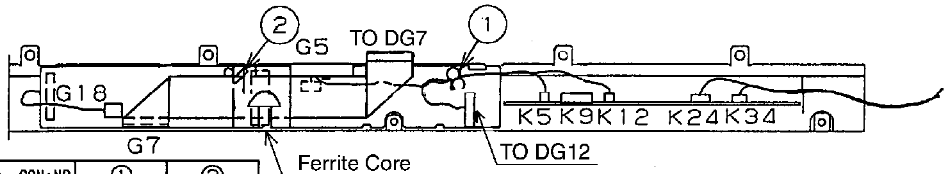
6.4. Lead of Wiring (4)


CLAMPER
TMM15414-2
SS32
SS34
④
⑤
C24
C23
⑥
SPL
SPR
①
DG12 DG7
③
G18
G5
②
K5 K9 K12
K24 K34

SS34, C24, SP (L、R)
DG12, DG7, G18, K9

CON:NO. - CON:NO.	①	②	③	④	⑤	⑥	○	○
PA9 - [K9]		○						
K12 - [DG12]		○						
K24 - [C24]			○	○	○			
K34 - [SS34]			○	○	○			
SS23 - [C23]					○			
PA3 - [SPR]	○							
PA3 - [SPL]					○	○		
G5 - K5		○						

6.5. Lead of Wiring (5)


②
G5
TO DG7
①
G18
K5 K9 K12 K24 K34
G7
Ferrite Core
TO DG12

CON:NO. -CON:NO.	①	②
K5-G5	○	
K12-DG12	○	
G7-DG7		○

Connector Connect
K5, K24, K34
G7, G18

7. Self-check Function

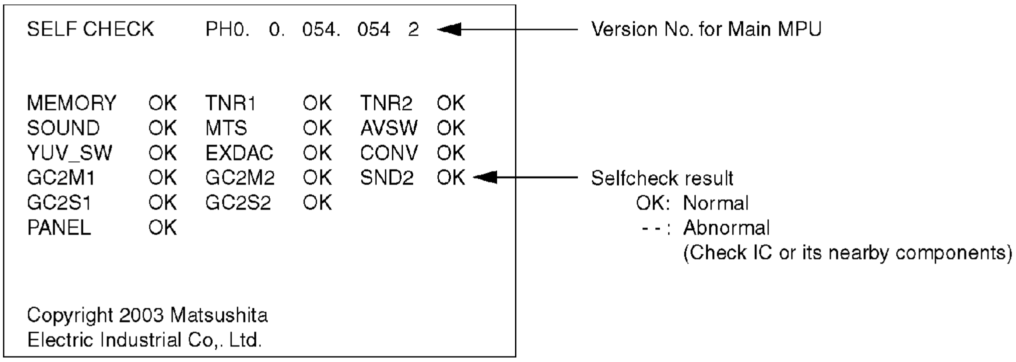
When symptoms like “the power fails sometimes” or “sometimes there is no picture and/or sound” can not be confirmed at the time of servicing, the self-check function can be used to confirm the occurrenceand to find the defective circuit.
In case of “power failure”, flashing of the “POWER” indication (red) at the front of the unit can be used to narrow down the +B line.

7.1. Self-check of the microcomputer control system (bus line)

Indicaton method
Press the “ACTION” button in the control panel of the unit simultaneously with the “POWER” button in the control panel of the unit. Hold them few seconds.

Return to he normal screen
Press any button on the unit or in the remote control.

Screen Display



```
SELF CHECK      PH0.  0.  054.  054  2

MEMORY     OK   TNR1      OK   TNR2   OK
SOUND      OK   MTS       OK   AVSW   OK
YUV_SW     OK   EXDAC     OK   CONV   OK
GC2M1      OK   GC2M2     OK   SND2   OK
GC2S1      OK   GC2S2     OK
PANEL      OK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Electric Industrial Co,. Ltd.
```

Version No. for Main MPU

Selfcheck result
OK: Normal
- - : Abnormal
(Check IC or its nearby components)

Display	Ref. No.	Description	Board
MEMORY	IC002	EEPROM for Main MPU	DG
SOUND	IC2401	Sound Control	H
YUV_SW	IC4301	YUV switch	H
GC2M1	IC4501	Global Core 2 for main	DG
GC2S1	IC4502	Global Core 2 for sub	DG
PANEL	- - - - -	Panel	- - - - -
TNR1	TNR201	Tuner 1	TA
MTS	IC4205	Multiplex sound	H
EXDAC	IC8031	External I/O	
GC2M2	IC4501	Global Core 2 for main	DG
GC2S2	IC4502	Global Core 2 for sub	DG
TNR2	TNR251	Tuner 2	TB
AVSW	IC4302	AV switch	H
CONV	IC3801	Convert Micom	DG
SND2	IC4203	BBE	H

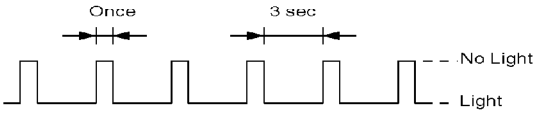
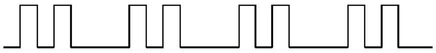
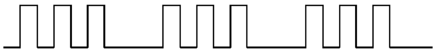
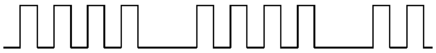
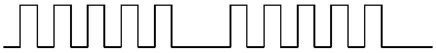
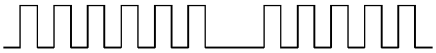
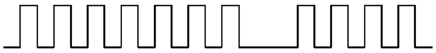
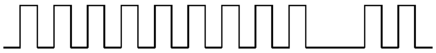
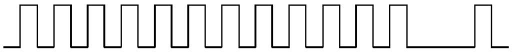
7.2. Power LED Blinking timing chart

1. Subject

Information of LED Flashing timing chart.

2. Contents

When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinkes of the Power LED on the front panel of the unit.

Blinking times	Blinking timing	Contents & Check point
1	 Once 3 sec No Light Light	Main Micom Power
2		SCAN Driver1
3		3.3V SOS
4		5V SOS
5		Power SOS
6		FAN
7		SCAN Driver2
9		SUS Driver
12		PA board Base Voltage (15, 12, 9, 5, 2.5V)

3. Remarks

Above Fan function is operated during the fans are installed.

7.3. No Power

[First check point]

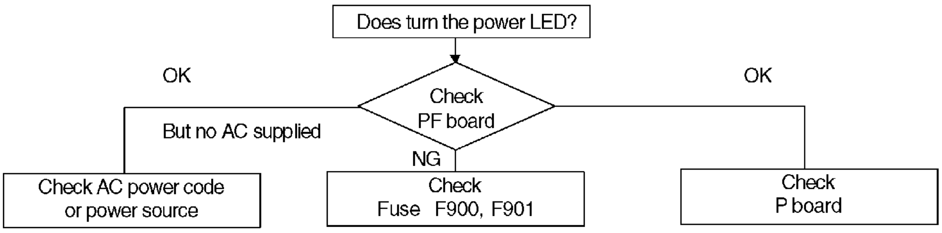
There are following 3 states of No Power indication by power LED.

1. No lit

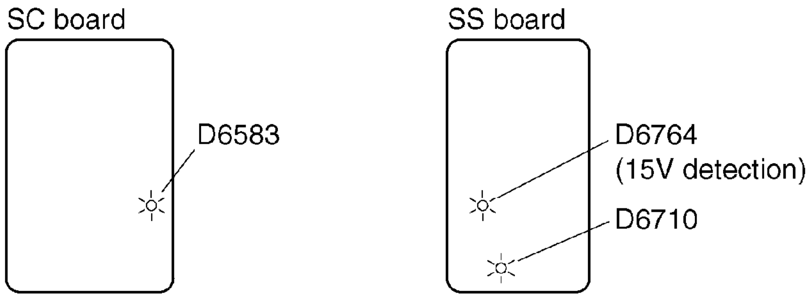
2. Green is lit then turns red blinking a few seconds later.

3. Only red is lit.

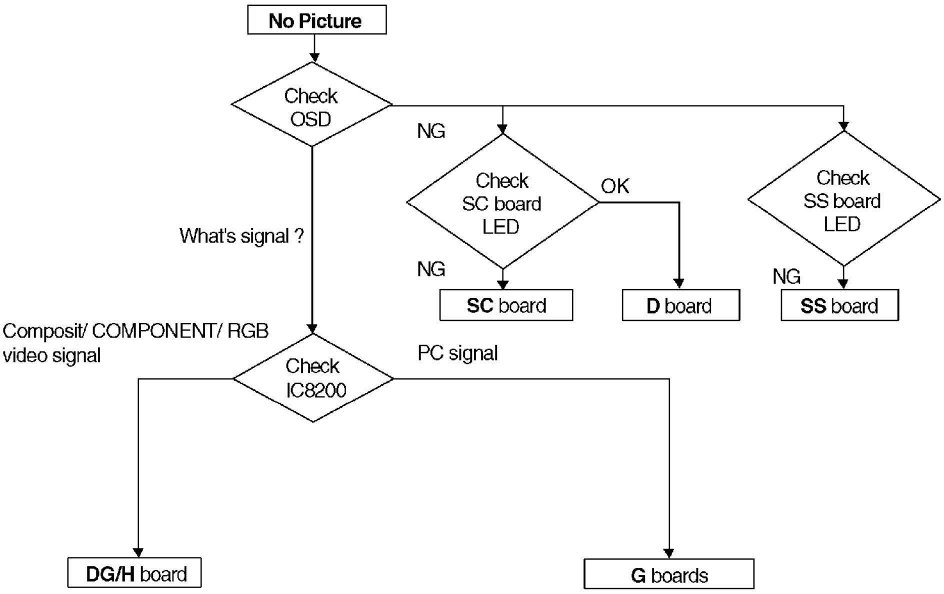
1. No lit


Does turn the power LED?
OK
OK
Check
PF board
But no AC supplied
NG
Check AC power code
or power source
Check
Fuse F900, F901
Check
P board

Drive circuits LED indicator


SC board
D6583
SS board
D6764
(15V detection)
D6710

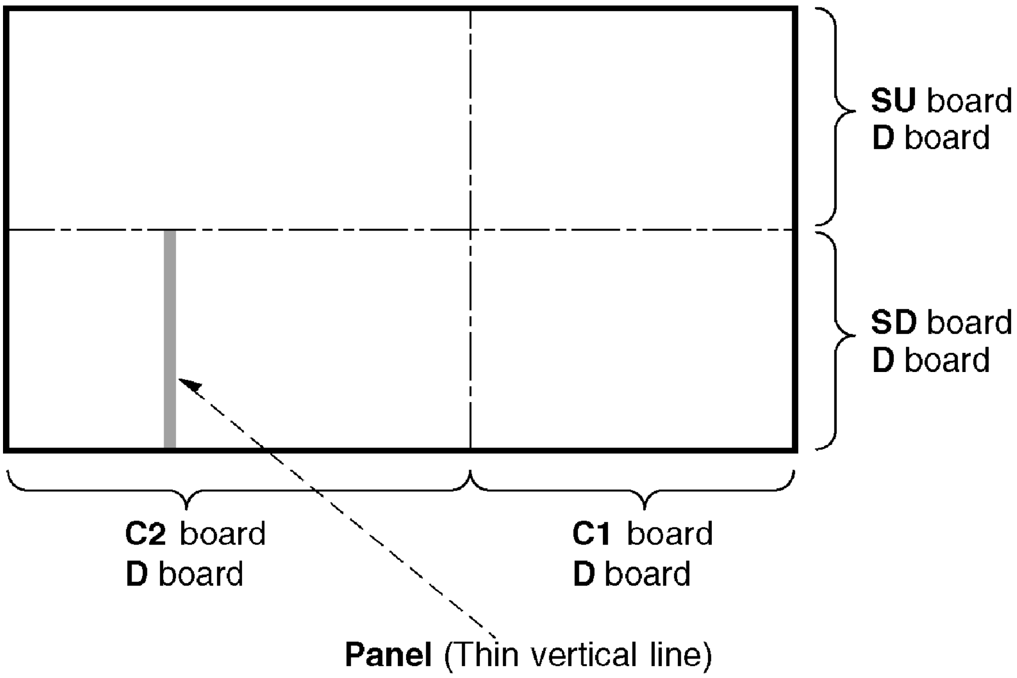
7.4. No Picture


No Picture
Check OSD
NG
Check SC board LED
OK
Check SS board LED
NG
SC board
D board
NG
SS board
What's signal ?
Composit/ COMPONENT/ RGB video signal
Check IC8200
PC signal
DG/H board
G boards

7.5. Local screen failure

Plasma display may have local area failure on the screen. Fig - 1 is the possible defect P.C.B. for each local area.

Fig - 1



<Local screen failure chart>

8. Serviceman Mode (Electronic Controls)

This Receiver has electronic technology using the I2 C BUS Concept. It performs as a control function and it replaces many mechanical controls. Instead of adjusting mechanical controls individually, many of the control function are now performedby using “On Screen Display Menu”. (The Serviceman Adjustment Mode .)

Note
It is suggested that the technician reads all the way through and understand the following the procedure for Entering/Exiting the Serviceman Mode ; then proceed with the instructions working the Receiver. When becoming familiarwith the procedure, the Flow Chart for Serviceman Mode may be used as a quick guide.

Quick Entry to Serviceman Mode:
At times when minor adjustments need to be done to the electronic controls, the method of Entering the serviceman Mode without removal of the cabinet back is as follows using the Remote Control:

1. Select SET-UP icon and select CABLE mode.

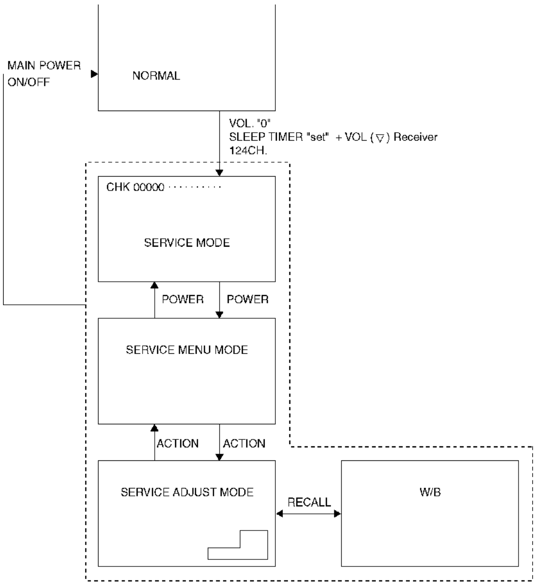
2. Select TIMER icon and set SLEEP time for 30 Min.

3. Press ACTION button twice to exit menus.

4. Tune to the Channel 124.

5. Adjust VOLUME to minimum (0).

6. Press the VOL ◀ button (decrease) on Receiver . Red “CHK” appears in upper corner.


MAIN POWER ON/OFF
NORMAL
VOL. "0"
SLEEP TIMER "set" + VOL (▽) Receiver
124CH.
CHK 00000 ··········
SERVICE MODE
POWER
POWER
SERVICE MENU MODE
ACTION
ACTION
SERVICE ADJUST MODE
RECALL
W/B

To toggle between Aging and Serviceman modes:

While the “CHK” is displayed on the left top corner of the screen, pressing the Action and the Volume up button on the Receiver simultaneously will toggle between the modes. Red “CHK” for Serviceman and yellow “CHK” forAging.

7. Press the Power Button on the Remote Control to select one of six Serviceman Adjustment Modes.

A. Serviceman MTS ADJUSTMENT.
B. Serviceman CLOCK ADJUSTMENT.
C. Serviceman VIDEO ADJUSTMENT.
D. Serviceman HDEF ADJUSTMENT.
E. Serviceman VDEF ADJUSTMENT.
F. Serviceman DAF ADJUSTMENT.
G. Serviceman OTHER ADJUSTMENT.

Note: *Only the applicable settings for the Receiver serviced will be available (See a in Fig.1).*

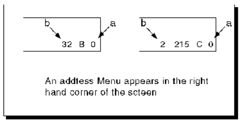

b
a
32 B 0
b
a
2 215 C 0
An address Menu appears in the right hand corner of the screen

Figure 1. **Serviceman Mode Menu Adjustments.**

Exiting the Serviceman Mode:
Press the Power buttons on the Receiver.

For Adjustments:

1. **Press Channel Up/Down on the Remote Control to select one of the available Service Adjustments (a in Fig.1).**

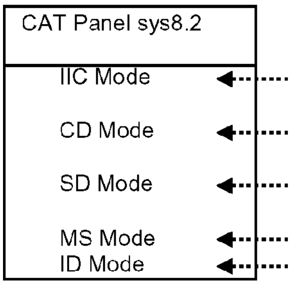
Note:
Write Down the original value set (b in Fig.1) for each address before modifying anything. It is easy to erroneously adjust the wrong item.

2. **Press Volume Up/Down on the Remote Control to adjust the level of the selected Service Adjustment (b in Fig.1).**

MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
MTS	MTSIN	10	3A		21
	SEPA L	10	3B		06
	SEPA H	10	3C		19
CLOCK	CLOCK	10	3D		128
VIDEO	COLOR	14	F2		19
	TINT	14	F6		88
	BRIGH	14	D4	01	FA
	CONT	14	D7		25
	B-Y_G	14	E0		3F
	CUT_G	15	0C	01	6C
	CUT_R	15	01	01	99
	CUT_B	15	13	01	A4
	BRT	14	D0		FB
	R DR	14	FB		9F
	B DR	15	00		A8
H	H POS	15	1C		CE
	H WID	15	1B		2B
	HP OF	15	61		FC
	HW OF	15	60		00
V	V POS	15	1E		0C
	V WID	15		[]	D1
	VP OF	15			20
	VW OF	15			29
OTHER	VMM_G	11	15		A0
	VMM_P	11	18		F3
	HHS	11	19		CB
	EW_SW	12	7B		00
	VTOP	12	59		86
	SOSSW	01	97		01
	POFWT	15	89		0A
	PSRVS				
	SPDYN	15	86		-00
EEP	AREA	15	9C		ALL
	IN▶EX	15	9D		
	EX▶IN	15	9E		

9. CAT (computer Aided Test) mode

CAT mode menu



Mode	Function	Access button
IIC	Service Alignment	Action
CD(Complete Diagnostics)	Software version information EEPROM edit	Mute more than 5 seconds
SD(Status Display)	MTBF parameter	Action
MS Mode	Not use	-----
ID	Not use	-----

How to access the CAT mode.

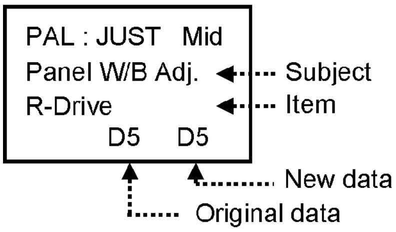
1. Enter the serviceman mode.
2. Select the OTHER (PSRVS).
3. Press the Action button on the remote control.

To exit the CAT mode , access the ID mode and switch off the main power.

9.1. IIC mode

Select the IIC mode by Up/Down button on the remote control at the front page of CAT mode then press the Action button on the remote control.

OSD



How to use the IIC mode.

1. Select the alignment **Subject** by **Up/Down buttons** on the remote control.
2. Select the alignment **Item** by **Left/Right buttons** on the remote control.
3. Adjust **optimum setting** by **Volume Up/Down buttons** on the remote control.
4. The **data is memorized** when press the **R button** on the remote control or change the alignment Subject (or Items).

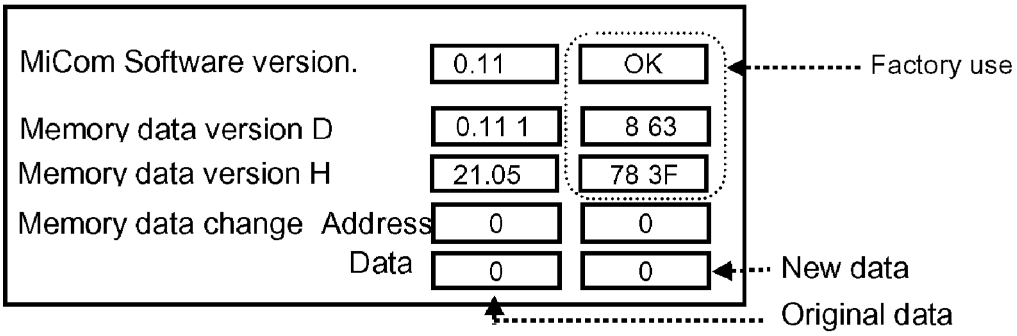
“IIC mode structure”.

To exit the IIC mode, press the RECALL button on the remote control.

9.2. CD mode

Select the CD mode by Up/Down button on the remote control at the front page of CAT mode then press the Mute button on the remote control more than 5 sec.

OSD

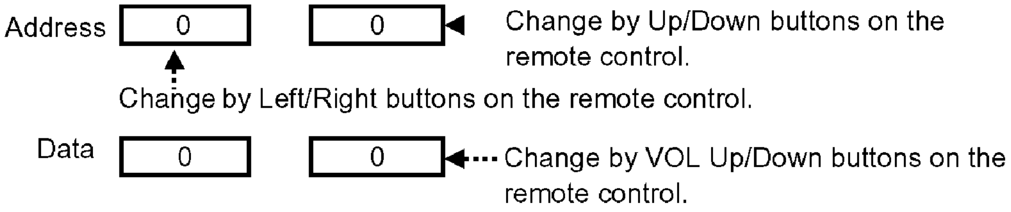

MiCom Software version.
0.11
OK
Factory use
Memory data version D
0.11 1
8 63
Memory data version H
21.05
78 3F
Memory data change Address
0
0
Data
0
0
New data
Original data

Micom software version (IC9354), this version can be upgrade by

1. replace of new version IC

2. Loading the new version software from loader tool, TZSC07036.

Memory data change


Address
0
0
Change by Up/Down buttons on the remote control.
Change by Left/Right buttons on the remote control.
Data
0
0
Change by VOL Up/Down buttons on the remote control.

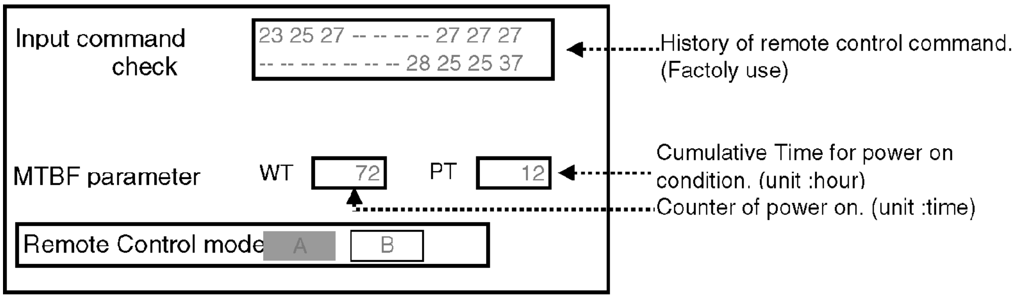
The data is memorized when switch off the main power.

To exit the CD mode, press the RECALL button on the remote control.

9.3. SD mode

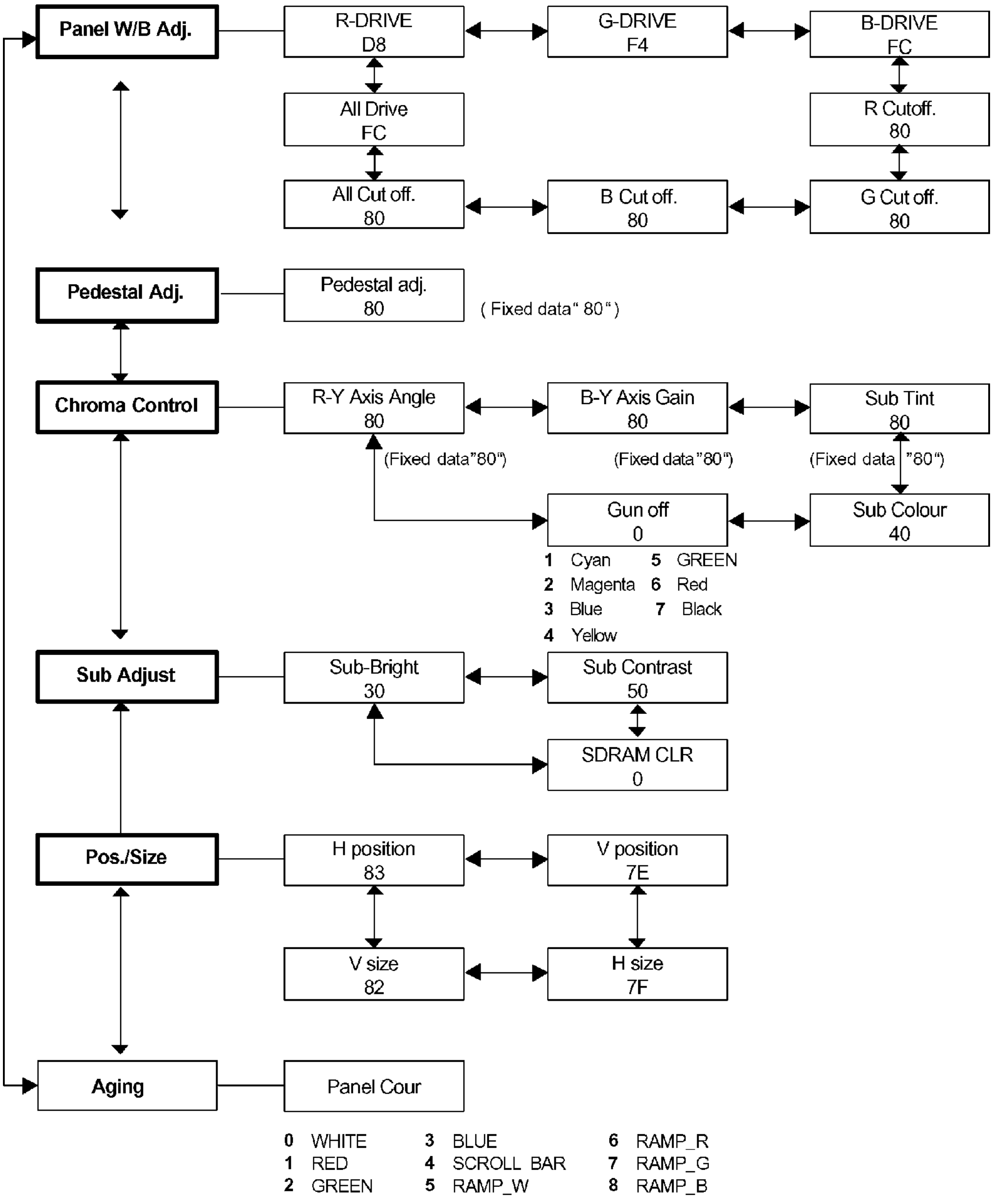
Select the SD mode by Up/Down button on the remote control at the front page of CAT mode then press the Action button on the remote control.

OSD


Input command check
23 25 27 -- -- -- -- 27 27 27
-- -- -- -- -- -- -- 28 25 25 37
History of remote control command. (Factoly use)
MTBF parameter
WT
72
PT
12
Cumulative Time for power on condition. (unit :hour)
Counter of power on. (unit :time)
Remote Control mode
A
B

To exit the SD mode, press the RECALL button on the remote control.

9.4. IIC mode structure (following items value is sample data.)


Panel W/B Adj.
R-DRIVE D8
G-DRIVE F4
B-DRIVE FC
All Drive FC
R Cutoff. 80
All Cut off. 80
B Cut off. 80
G Cut off. 80
Pedestal Adj.
Pedestal adj. 80
(Fixed data" 80")
Chroma Control
R-Y Axis Angle 80
B-Y Axis Gain 80
Sub Tint 80
(Fixed data"80")
(Fixed data"80")
(Fixed data "80")
Gun off 0
Sub Colour 40
1 Cyan
2 Magenta
3 Blue
4 Yellow
5 GREEN
6 Red
7 Black
Sub Adjust
Sub-Bright 30
Sub Contrast 50
SDRAM CLR 0
Pos./Size
H position 83
V position 7E
V size 82
H size 7F
Aging
Panel Cour
0 WHITE
1 RED
2 GREEN
3 BLUE
4 SCROLL BAR
5 RAMP_W
6 RAMP_R
7 RAMP_G
8 RAMP_B

These are selected by Action button of Remote.

10. Adjustment Procedure

10.1. +B Set-up

10.1.1. Item / Preparation

1. Input a Grey scale signal.

2. Set the picture controls: -
Picture mode: Normal
White balance: Normal

10.1.2. Adjustment / Confirmation

Adjust and confirm indicated test point for the specified voltage.

Adjust

Name	Volume	Voltage	Test Point	Remarks
Vsus	R605	170V ± 1V	P11 pin 2	
Vda	R590	67V ± 0.5V	P12 pin 1	

Confirm

Name	Voltage	Test Point	Remarks
15V	15.4V ± 0.5V	P23 pin 1	
15V	15.2V ± 0.5V	P7 pin 1	
12V	11.8V ± 0.5V	P25 pin 1	
Audio 12V	12.5V ± 0.8V	P5 pin 7	
5V	5.1V ± 0.3V	P25 pin 5	
STB 5V	5.0V ± 0.3V	P27 pin 4	
Fan 15V	15.4V ± 0.5V	P10 pin 1	
Fan 5V	5.1V ± 0.3V	P10 pin 4	
PFC	380V ± 15V	C468(+), C468(-)	

10.2. Driver Set-up

10.2.1. Item / Preparation

1. Input an APL 100 % white signal.
2. Set the picture controls: -
   Picture mode: Normal
   White balance: Cool
   Aspect: 16:9

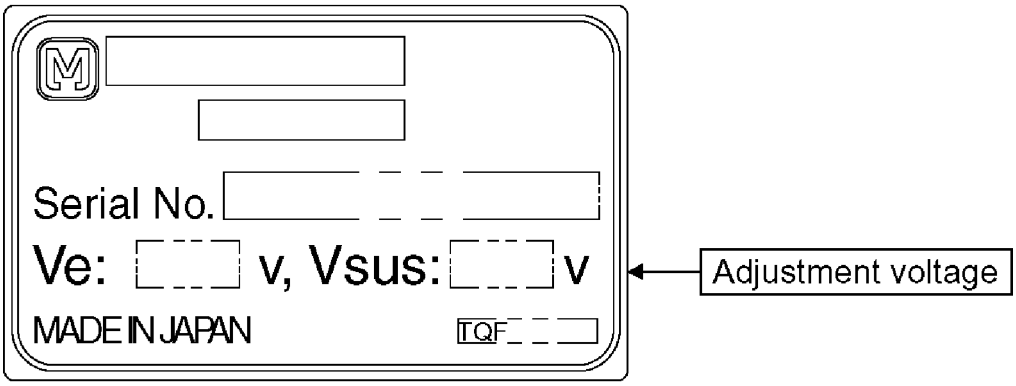
10.2.2. Adjustments

Adjust driver section voltages referring the panel data on the panel data label.

Name	Test Point	Voltage	Volume	Remarks
Vsus	TPVSUS (SS)	170V ± 1V	R605 (P)	
Vbk	TPVBK (SC)	155V ± 5V	R6443 (SC)	
Ve	TPVE (SS)	158V ± 1V	R6774 (SS)	
Vset	TPVSET (SC)	218V ± 6V	---	
Vad	TPVAD (SC)	-90V ± 1V	R6477 (SC)	
Vscn	TPVSCN (SC)	Vad*+118V ± 2V	---	
Vda	TPVDA (SS)	67V ± 1V	R590 (P)	

***See the Panel label.**

Panel Label information



10.3. Initialization Pulse Adjust

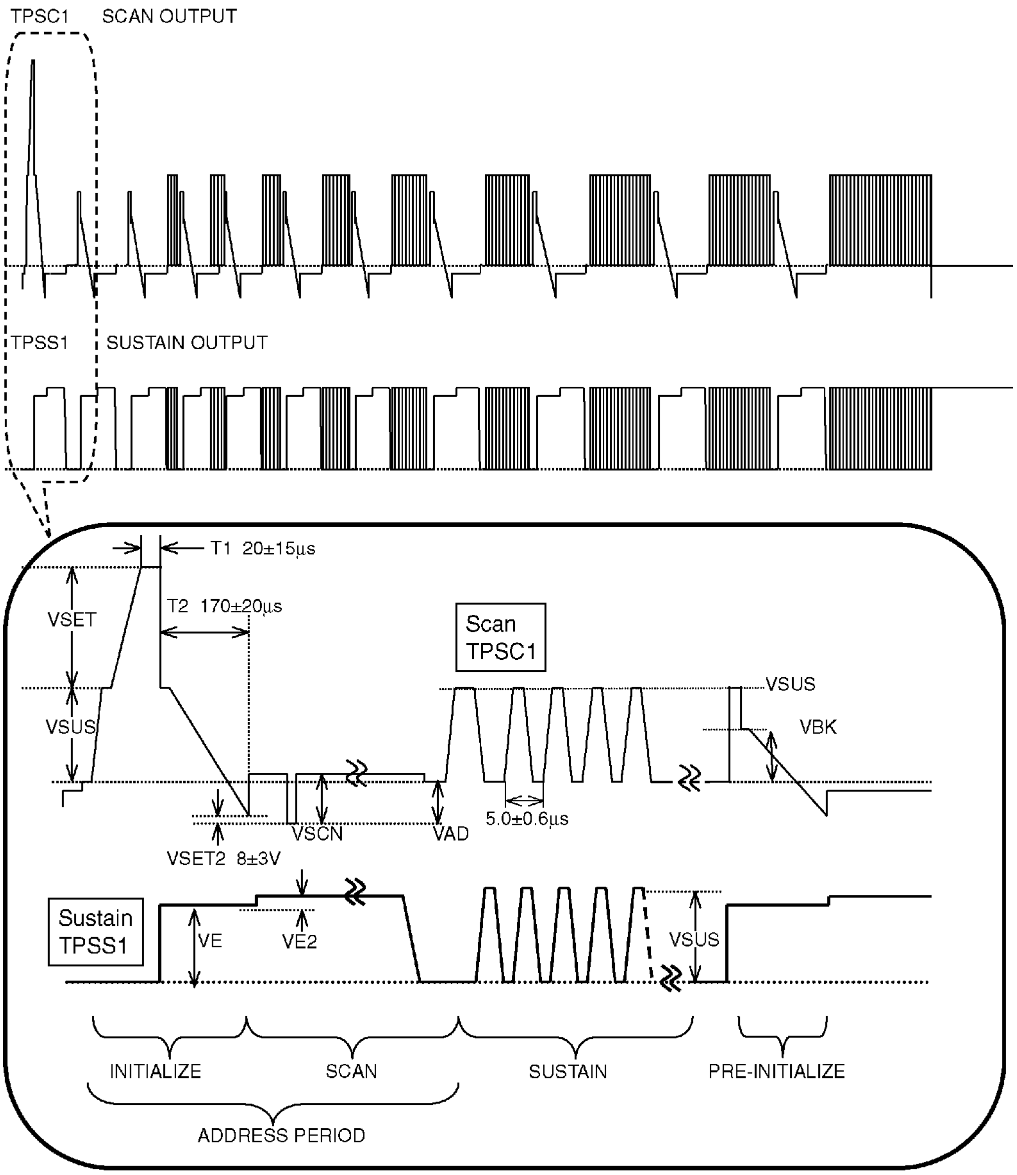
1. Input a Cross hatch signal.

2. Set the picture controls: -

Picture mode: Normal
White balance: Cool

Adjust the indicated test point for the specified wave form.

	Test point	Volume	Level
T1	TPSC1 (SC)	R6523 (SC)	20 ± 15 μ Sec
T2	TPSS1 (SS)	R6557 (SC)	170 ± 20 μ Sec


TPSC1
SCAN OUTPUT
TPSS1
SUSTAIN OUTPUT
T1 20±15µs
T2 170±20µs
VSET
VSUS
Scan
TPSC1
VSUS
VBK
VSET2 8±3V
VSCN
VAD
5.0±0.6µs
Sustain
TPSS1
VE
VE2
VSUS
INITIALIZE
SCAN
SUSTAIN
PRE-INITIALIZE
ADDRESS PERIOD

10.4. P.C.B. (Printed Circuit Board) exchange

10.4.1. Caution

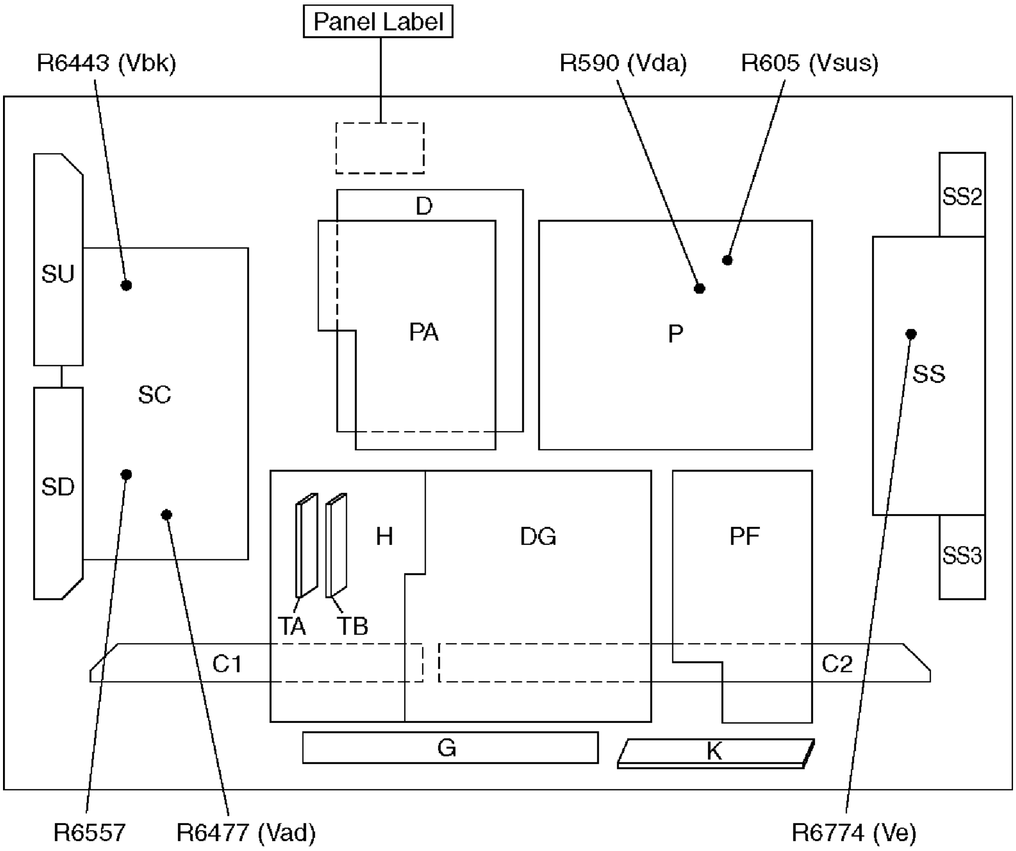
1. **To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.**

10.4.2. Quick adjustment after P.C.B. exchange

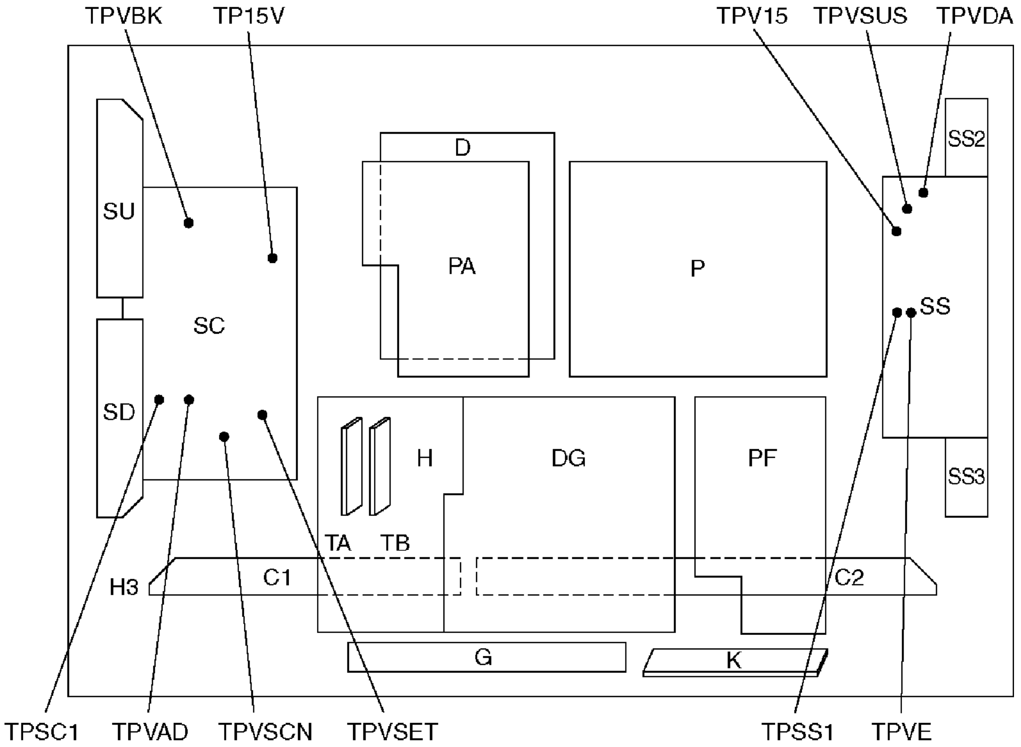
P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board	Vsus	TPVSUS (SS)	170V ± 1V	R605 (P)	
	Vda	TPVDA (SS)	67V ± 1V	R590 (P)	
SC Board	Vbk	TPVBK (SC)	155V ± 5V	R6443 (SC)	
	Vad	TPVAD (SC)	-90V ± 1V	R6477 (SC)	
	Vset	TPVSET (SC)	218V ± 6V	---	
	Vscn	TPVSCN (SC)	Vad + 118 ± 2V	---	
SS Board	Ve	TPVE (SS)	158V ± 1V	R6774 (SS)	
D, DG Board	White blance, Pedestal and Sub brightness for NTSC, PAL, HD, PC and 625i signal				

***See the Panel label.**

10.5. Adjustment Volume Location


Panel Label
R6443 (Vbk)
R590 (Vda)
R605 (Vsus)
D
SS2
SU
PA
P
SC
SS
SD
H
DG
PF
SS3
TA
TB
C1
C2
G
K
R6557
R6477 (Vad)
R6774 (Ve)

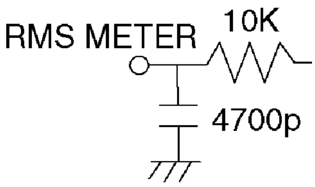
10.6. Test Point Location


TPVBK
TP15V
TPV15
TPVSUS
TPVDA
SU
SC
D
PA
P
SS2
SS
SD
H
DG
PF
SS3
TA
TB
H3
C1
C2
G
K
TPSC1
TPVAD
TPVSCN
TPVSET
TPSS1
TPVE

11. Adjustment

11.1. MTS Adjustment

11.1.1. Input level Adjustment

Instrument name	Connection	Remarks
1. Filter jig 2. 2 RF signal generator 3. RMS voltage meter 4. Measurement computer	**TP215 (L out)** **RF ANT. INPUT** **Filter jig** **SCL2, SDA2, FA2**	 RMS METER 10K 4700p
Procedure		**Remarks**
1. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,100% modulation ,monaural (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** **Make sure 75us PRE-EMPHASIS is off.** 2. Adjust "MTSIN" data (Input level) until the RMS voltage meter indicates 106mVrms ± 6mVrms.		

11.1.2. STERO Sep. Adjustment

Instrument name	Connection	Remarks
1. RF signal generator 2. Oscilloscope 3. Measurement computer	RF ANT. INPUT TP216-GND SCL2, SDA2, FA2	

Procedure	Remarks
1. Select STEREO mode in the AUDIO Menu. 2. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB ,75 Ω OPEN ,P/S 10dB) **Note:** **After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on.** 3. Adjust "SEPAL" data (Low-level separation) until the amplitude. 4. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 3kHz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** **After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on.** 5. Adjust "SEPAH" data (High-level separation) until the amplitude of the waveform on the oscilloscope is minimum. 6. Repeat steps 2. to 5. until Low-level separation and High-level separation satisfy above-mentioned conditions.	The separation mustbe m 20 dB at 300Hz and 3kHz

11.2. Sub contrast Adjustment (NTSC)

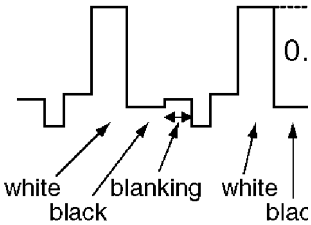
Preparation

Picture mode : VIVID (NORMAL SET)
Adjustment data : BRIGH, CONT

ACL	OFF
WHITE CHARACTER CORRECTION	OFF
COLOR	OFF
VPK (V contour)	OFF
DSC	OFF
AI	OFF

(NOTE) Don't operation ABL circuit when adjust sul

Instrument name	Connection	Remarks
1. Oscilloscope 2. Adjustment check RACK 3. Measurement computer	G out	

Procedure	Remarks
1. Apply a studio color bar. (Other method) 2. Adjust "CONT" data to obtain 0.7 ± 0.02 V between black and 1white.	< studio color bar > 

11.3. Sub contrast Adjustment (HDTV)

Preparation

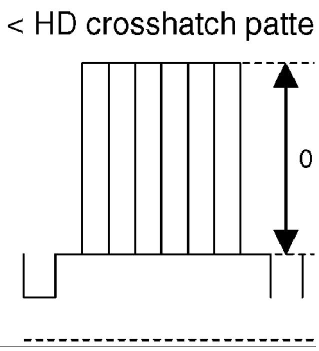
Picture mode : VIVID (NORMAL SET)
Adjustment data : BRIGH, CONT

ACL	OFF
WHITE CHARACTER CORRECTION	OFF
COLOR	OFF
VPK (V contour)	OFF
DSC	OFF
AI	OFF

(NOTE) Don't operation ABL circuit when adjust sul

Instrument name	Connection	Remarks
1. Oscilloscope 2. Adjustment check RACK 3. Measurement computer	G out	

Procedure	Remarks

1. Apply a HD crosshatch pattern. 2. Adjust "CONT" data to obtain 0.7 ± 0.02 V between black and white.	

< HD crosshatch patte
0

11.4. Pedestal setting

11.5. NTSC panel white balance

11.6. HD panel white balance

11.7. Sub brightness setting

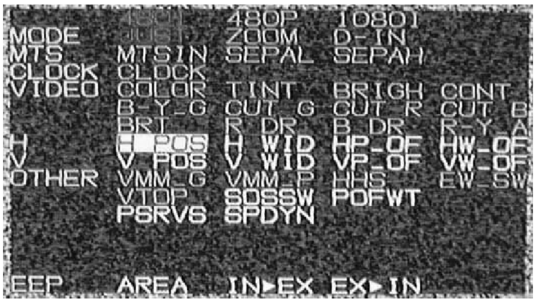
12. Hotel mode

1. Purpose

Restrict a function for hotels.

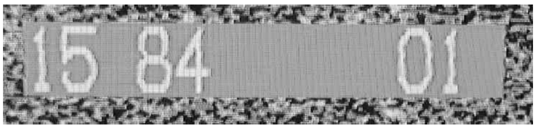
2. Access command

- Enter to the Service Mode.



480I 480P 1080I
MODE JUST ZOOM D-IN
MTS MTSIN SEPAL SEPAH
CLOCK CLOCK
VIDEO COLOR TINT BRIGH CONT
B-Y_G CUT G CUT R CUT B
BRT R DR B DR R-Y_A
H H POS H WID HP_OF HW_OF
V V POS V WID VP_OF VW_OF
OTHER VMM_G VMM_P HHS EW_SW
VTOP SDSSW POFWT
PSRVS SPDYN
EEP AREA IN▸EX EX▸IN

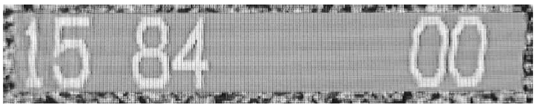
- Press MUTE button on remote control. Hold few seconds.
- Set the data of EEPROM(ADDRESS 1584) to 01.



Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.
It can be made Hotel mode.

3. Exit command

- **First, set the data of EEPROM (ADDRESS 1584) to 00.**



15 84 00

Next, Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.

Then, it is no longer hotel mode.

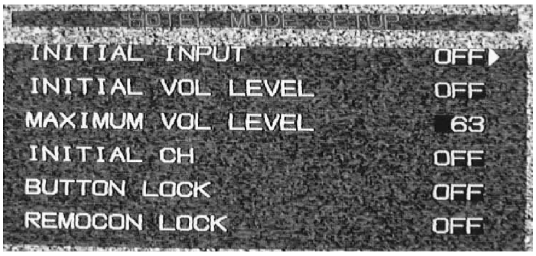
4. Access command to the Hotel mode setup menu

- **<Prerequisite> : It is conditions that the data of EEPROM(ADDRESS 1584) is 01.**

In order to display the Hotel mode setup menu, please enter the following command (within 2 second).

[[TV] : down + [REMOTE] : TV/VIDEO (3 times)]

Then, the Hotel mode setup menu is displayed.



HOTEL MODE SETUP

INITIAL INPUT OFF

INITIAL VOL LEVEL OFF

MAXIMUM VOL LEVEL 63

INITIAL CH OFF

BUTTON LOCK OFF

REMOCON LOCK OFF

5. Explain the Hotel mode setup menu

CAUTION

This setup is not valid, unless data of EEPROM (ADDRESS 1584) will be 01, even if each settings were done.

item	Function
INITIAL INPUT	**Select input signal modes.** **Set this signal, each time power is switched on.** **<Selection> :** **Off/TV/COMP1/COMP2/DIGITAL/ VIDEO1/VIDEO2/VIDEO3/PC/JPEG** **-Off: give priority to a last memory.** **-PC: selectable with VGA option**
INITIAL VOL LEVEL	**Adjust output Volume.** **Set this volume, each time power is switched on.** **If the value of InitVol is changed, volume will change. However, priority is given to a last memory when InitVol is Off. When"InitVol" is larger than "MaxVol", make "InitVol" and "MaxVol" the same.** **<Selection/Range> :** **Off/0 to 63** **-Off: give priority to a last memory**
MAXIMUM VOL LEVEL	**Adjust maximum volume.** **Set this max. volume, each time power is switched on.** **When "MaxVol" is smaller than "InitVol", make "MaxVol" and "InitVol" the same, if "InitVol" is not Off.** **<Range> :** **0to 63**
INITIAL CH	**Select program number.** **Set this program number, each time power is switched on.** **<Selection> :** **Off/0 to C125** **-Off: give priority to a last memory**
BUTTON LOCK	**Select local key conditions.** **Set this condition, each time power is switched on.** **<Selection> :** **Off/SETUPMENU/All** **-Off: altogether valid** **-Action: restrict ACTION-key selection** **-All: altogether invalid.**

item	Function
REMOCON LOCK	Select remote control key conditions. Set this condition, each time power is switched on. <Selection> : Off/SETUP/MENU -Off: altogether valid -Action: menu is invalid

13. Conductor Views

13.1. PF-Board

13.2. P-Board

13.3. PA-Board

13.4. TA and TB-Board

13.5. H-Board

13.6. DG-Board

13.7. D-Board

13.8. C1-Board

13.9. C2-Board

13.10. SC-Board

13.11. SU and SD-Board

13.12. SS, SS2 and SS3-Board

13.13. K and G-Board

14. Block and Schematic Diagrams

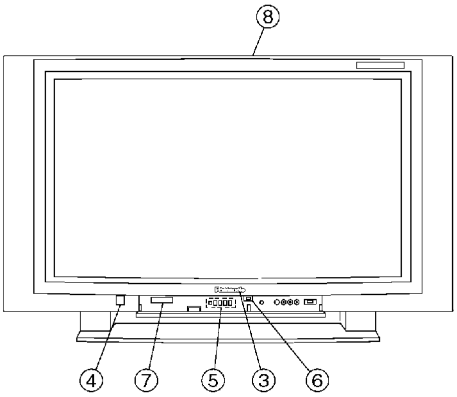
14.1. Schematic Diagram Notes

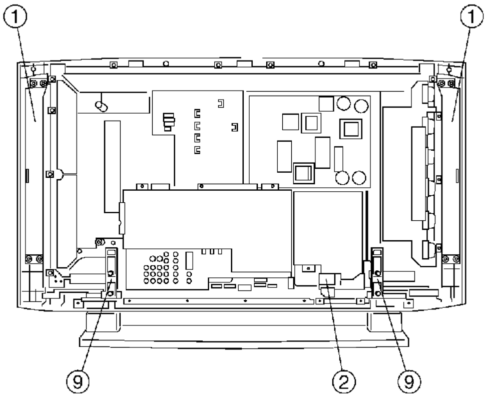
14.2. Main Block Diagram

14.3. PF and P-Board Block Diagram

14.4. PF and P-Board (1 of 2) Schematic Diagram
14.5. PF and P-Board (2 of 2) Schematic Diagram
14.6. PA-Board Block Diagram
14.7. PA-Board (1 of 3) Schematic Diagram
14.8. PA-Board (2 of 3) Schematic Diagram
14.9. PA-Board (3 of 3) Schematic Diagram
14.10. H, TA and TB-Board Block Diagram
14.11. TA and TB-Board Schematic Diagram
14.12. H-Board (1 of 2) Schematic Diagram
14.13. H-Board (2 of 2) Schematic Diagram
14.14. DG-Board Block Diagram
14.15. DG-Board (1 of 8) Schematic Diagram
14.16. DG-Board (2 of 8) Schematic Diagram
14.17. DG-Board (3 of 8) Schematic Diagram
14.18. DG-Board (4 of 8) Schematic Diagram
14.19. DG-Board (5 of 8) Schematic Diagram
14.20. DG-Board (6 of 8) Schematic Diagram
14.21. DG-Board (7 of 8) Schematic Diagram
14.22. DG-Board (8 of 8) Schematic Diagram
14.23. D-Board Block Diagram
14.24. D-Board (1 of 11) Schematic Diagram
14.25. D-Board (2 of 11) Schematic Diagram
14.26. D-Board (3 of 11) Schematic Diagram
14.27. D-Board (4 of 11) Schematic Diagram
14.28. D-Board (5 of 11) Schematic Diagram

14.29. D-Board (6 of 11) Schematic Diagram
14.30. D-Board (7 of 11) Schematic Diagram
14.31. D-Board (8 of 11) Schematic Diagram
14.32. D-Board (9 of 11) Schematic Diagram
14.33. D-Board (10 of 11) Schematic Diagram
14.34. D-Board (11 of 11) Schematic Diagram
14.35. C1, C2, G and K-Board Block Diagram
14.36. C1-Board Schematic Diagram
14.37. C2-Board Schematic Diagram
14.38. G and K-Board Schematic Diagram
14.39. SC-Board Block Diagram
14.40. SC-Board (1 of 2) Schematic Diagram
14.41. SC-Board (2 of 2) Schematic Diagram
14.42. SU-Board Block Diagram
14.43. SU-Board Schematic Diagram
14.44. SD-Board Block Diagram
14.45. SD-Board Schematic Diagram
14.46. SS, SS2 and SS3-Board Block Diagram
14.47. SS, SS2 and SS3-Board Schematic Diagram
15. Parts Location





16. Mechanical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	EAB442BR2	SPEAKER	2	
	EUR7603ZC0	REMOTE CONTROL	1	
	J0KG00000042	NOISE FILTER	1	
	K1KA02A00096	2P CONNECTOR	1	
	K1KA08A00218	8P CONNECTOR	1	
	K1KA08B00119	8P CONNECTOR	2	
	K1KA09A00046	9P CONNECTOR	1	
	K1KA09A00126	9P CONNECTOR	1	
	K1KA20B00103	20P CONNECTOR	1	
	K1KA20B00125	20P CONNECTOR	1	
	K1KA30B00054	30P CONNECTOR	1	
	K1KA40B00062	40P CONNECTOR	1	
2	K2AH3H000028	AC INLET	1	⚠
	K2CG3DH00025	AC CORD	1	⚠
	MD42S06A1J	PLASMA DISPLAY PANEL	1	⚠
3	TBMA138	PANASONIC BADGE	1	
4	TBXA36303	POWER BUTTON	1	
5	TBXA36402	CONTROL BUTTON	1	
6	TEK6935	DOOR SWITCH	1	
	TEKC011	DAMPER	1	
	TES4G204	SPRING	1	
	THEL023Z	SCREW	28	
	THEL027N	SCREW	3	
	THEL035N	SCREW	81	
	THTF003Y	SCREW	19	
	TJS5A9450	8P CONNECTOR	2	K1KA08B00117
	TJSF18228	28P CONNECTOR	1	K1MN28A00023
	TJSF31010	CONNECTOR	1	K1KA10A00170
	TJSF43806A	6P CONNECTOR	1	K1KA06A00189
	TKGA5120	FRONT GALLAS	1	
7	TKKC5151	LED PANEL	1	
	TKKL5231	COVER	4	
	TKKL5269	COVER	1	
	TKRA06806	HANDLE	2	
	TMM15414-2	CLAMPER	2	
	TMM17499	CLAMPER	1	
	TMM25401	CLAMPER	3	
	TMM25401	CLAMPER	2	
	TMM7464-2	CLAMPER	1	
	TMME047	CLAMPER	11	
	TMME061	CLAMPER	2	
	TMME075	EADG SADOLE	3	
	TMME108	CABLE STRAP	2	
	TMME152	CLAMPER	2	
	TMME226	AC CORD CLAMPER	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	TMMJ044	SPEAKER RUBBER	8	
	TMWJ034	LED HOLDER	1	
	TMWJ035	IR HOLDER	1	
	TMXX021-1	CORE HOLDER	2	
	TPCB26401	BOTTOM CARTON	1	
	TPCB42401	CARTON BOX	1	
	TPCB42501	BOTTOM CARTON	1	
	TPCB43301	CARTON BOX	1	
	TPD169487	JOINT	8	
	TPDA0641	CUSHION (UPPER)	1	
	TPDA0642-2	CUSHION (BOTTOM)	1	
	TPDA0789	CUSHION (UPPER)	1	
	TPDA0790	CUSHION (BOTTOM)	1	
	TPDF0737	PAPER BOX	1	
	TPDF0878	UPPER PAD	1	
	TPDF1087	UPPER PAD	1	
	TPEH170	PROTECT COVER	1	
	TQBC0616	INSTRUCTION BOOK (ENGLISH)	1	⚠
	TQBC0617	INSTRUCTION BOOK (FRENCH)	1	⚠
	TQBC0618	INSTRUCTION BOOK (SPANISH)	1	⚠
	TQBC7060-2	SERVICE CENTER LIST	1	
	TSXL139	CABLE	6	
	TSXL222	CABLE (C-C)	1	
	TSXL231	CABLE	6	
	TSXL278	FFC REED (FPC) (D-C1/2)	2	
	TSXL324	CABLE(DG7-G7)	1	
8	TTEA0133	ESCUTCHEON	1	⚠
	TTPA0321	BOTTOM DOOR	1	
	TTUA0701	REAR COVER	1	
9	TXFMZ010QCS	STAND POOL BRACKET	2	
	TXJPA30QCS	SPEKER LAED (LEFT/RIGHT)	1	
	XTB4+10A	SCREW	27	
	XTB4+15AFZ	SCREW	8	
	XTB4+20A	SCREW	7	
	XTV3+10JFZ	SCREW	9	
	XTW4+Z15D	SCREW	8	
	XYC4+FJ35FZ	SCREW	12	
	XYN3+C8	SCREW	2	
	XYN3+F10	SCREW	11	
	XYN3+F10FZ	SCREW	10	
	XYN3+F8	SCREW	14	
	XYN3+J10	SCREW	4	
	XYN3+J8	SCREW	6	
	XYN4+E8	SCREW	1	
	XYN5+C20	SCREW	8	
	XZBT6506	POLY BAG	1	

17. Replacement Parts List

17.1. Replacement Parts List Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

Type Allowance

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z, 50V

Type Allowance

Type	Allowance
C : Carbon	F : ±1%
F : Fuse	G : ±2%
M : Metal Oxide	J : ±5%
Metal FIlm	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

Type	Allowance
C : Ceramic	C : ±0.25pF
E : Electrolytic	D : ±0.5pF
P : Polyester	F : ±1pF
Polyprop	G : ±3pF
lene	J : ±5pF
T : Tantalum	K : ±10pF
	L : ±15pF
	M : ±20pF
	P : +100%, -0%
	Z : +80%, -20%

17.2. Electrical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
F900.901	K5Y802B00001	FUSE	2	⚠
C11	K1MN50B00026	50P CONNECTOR	1	
C12	K1MN20B00043	CONNECTOR	1	
C21	K1MN50B00026	50P CONNECTOR	1	
C22	K1MN20B00043	CONNECTOR	1	
C23	K1KA11A00102	11P CONNECTOR	1	
C24	K1KA08A00232	8P CONNECTOR	1	
C300	ECA1HHG470	E 47UF, 50V	1	
C301	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C304,05	ECJ2VF1H103Z	C 0.01UF, Z, 50V	2	
C403-05	ECKDAE472ZE	C 4700PF, Z,	3	⚠
C406	ECA2WHG100	E 10UF, 450V	1	
C407	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C408	ECKD3D392KBP	C 3900PF, K, 2KV	1	
C409	ECA1EHG470	E 47UF, 25V	1	
C410	ECKD2H821KB5	C 820PF, K,500V	1	
C411	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C412	ECA1HHG100	E 10UF, 50V	1	
C413	ECA1HHG470	E 47UF, 50V	1	
C414	ECKD2H561KB2	C 560PF, K,500V	1	
C415	ECJ3VC1H472J	C 4700PF, J, 50V	1	
C416	EEUFC1C471	E 470UF, 16V	1	
C417	ECA1EHG470	E 47UF, 25V	1	
C418	ECA1CHG101	E 100UF, 16V	1	
C419	ECA1AHG471	E 4700UF, 10V	1	
C420	ECA1EHG101	E 100UF, 25V	1	
C421,22	ECKF1H223ZF	C 0.022UF, Z, 50V	2	
C423	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C451-53	ECKDAE472ZE	C 4700PF, Z,	3	⚠
C455	ECQE6105JF	P 1UF, J,630V	1	
C456	EEUFC1V331	E 220UF, 35V	1	
C457	ECQB1H103JF	P 0.01UF, J, 50V	1	
C458	ECJ2VC1H821J	C 820PF, J, 50V	1	
C459	EEUFC1H330	E 33UF, 50V	1	
C460	ECJ2XC1H101J	C 100PF, J, 50V	1	
C461	ECJ2XC1H331J	C 330PF, J, 50V	1	
C462	ECQB1H104JF	P 0.1UF, J, 50V	1	
C463	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C464	ECQB1H104JF	P 0.1UF, J, 50V	1	
C465	ECA1HHG010	E 1UF, 50V	1	
C466	ECKD3D101KBP	C 100PF, K, 2KV	1	
C468,69	EETHC2W331L	E 330UF, 450V	2	
C470	ECA1EHG331	E 330UF, 25V	1	
C471	ECQB1H104JF	P 0.1UF, J, 50V	1	
C548	EEUEB1E101	E 100UF, 25V	1	
C549	EEUEB1H101	E 100UF, 50V	1	
C550	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C551,52	ECJ2XC1H471J	C 470PF, J, 50V	2	
C553	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C554	ECJ2XC1H221J	C 220PF, J, 50V	1	
C555	EEUEB1E101	E 100UF, 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C556	EEUEB1H220	E 22UF, 50V	1	
C557	ECQE6473KF	P 0.047UF, K,630V	1	
C558	ECKD3D101KBP	C 100PF, K, 2KV	1	
C559	ECQE6473KF	P 0.047UF, K,630V	1	
C560	ECKD3D221KBP	C 220PF, K, 2KV	1	
C561,62	ECJ3VC1H472J	C 4700PF, J, 50V	2	
C563	ECKDNA102KB	C 1000PF, Z,	1	⚠
C564	ECKD3A101KBP	C 100PF, K, 1KV	1	
C565	EETHC2C821B	E 820UF, 160V	1	
C566	ECKD3D102KBP	C 1000PF, K, 2KV	1	
C567,68	ECJ3VC1H472J	C 4700PF, J, 50V	2	
C569	ECKD3A101KBP	C 100PF, K, 1KV	1	
C570	ECKD3A471KBP	C 470PF, K, 1KV	1	
C571	ECKD3A101KBP	C 100PF, K, 1KV	1	
C572	EEUFC1E222	E 2200UF, 25V	1	
C573,74	EETHC2D182L	E 1800UF, 200V	2	
C575	EEUEB1H220	E 22UF, 50V	1	
C576	EEUFC1E222	E 2200UF, 25V	1	
C577	ECA1EHG222	E 2200UF, 25V	1	
C578	ECQB1H332JF	P 3300PF, J, 50V	1	
C579	ECA1EHG221	E 220UF, 25V	1	
C581	EEUFC0J122	E 1200UF, 6.3V	1	
C583	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C584	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C585	EEUEB1E101	E 100UF, 25V	1	
C586	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C590	EEUFC1E222	E 2200UF, 25V	1	
C591	ECKD3A101KBP	C 100PF, K, 1KV	1	
C650	EEUEB1H101	E 100UF, 50V	1	
C901	ECQU2A105BN9	P 1UF, 250V	1	⚠
C902	ECQU2A224BN9	P 0.22UF, 250V	1	⚠
C903	ECQU2A105BN9	P 1UF, 250V	1	⚠
C910,11	ECKDNB221MB	C 220PF, Z,	2	⚠
C915	ECQU2A224BN9	P 0.22UF, 250V	1	⚠
C916,17	ECKDNB102KB	C 1000PF, Z,	2	⚠
C2301-04	ECJ2VF1C105Z	C 1UF, Z, 16V	4	
C2305,06	ECA1VHG470	E 47UF, 35V	2	
C2307,08	ECA1HHG4R7	E 4.7UF, 50V	2	
C2309,10	ECJ3VF1C225Z	C 2.2UF, Z, 16V	2	
C2311,12	ECJ2XB1H682K	C 6800PF, K, 50V	2	
C2313,14	ECA1HHG2R2	E 2.2UF, 50V	2	
C2315,16	ECQV1H473JM	P 0.047UF, J, 50V	2	
C2317,18	ECA1VHG221	E 220UF, 35V	2	
C2321,22	ECQV1H225JM	P 2.2UF, J, 50V	2	
C2323,24	ECJ2XC1H102J	C 1000PF, J, 50V	2	
C2325,26	ECA1EHG471	E 470UF, 25V	2	
C2327-30	ECQV1H104JM	P 0.1UF, J, 50V	4	
C2331,32	ECJ2XB1E104K	C 0.1UF, K, 25V	2	
C2333,34	ECA1EHG471	E 470UF, 25V	2	
C2337,38	ECA1CHG101	E 100UF, 16V	2	
C2339	ECA1HHG100	E 10UF, 50V	1	
C2342	ECA1HHG100	E 10UF, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2344	ECA1CHG221	E 220UF, 16V	1	
C2352	ECA1CHG101	E 100UF, 16V	1	
C2381	ECA1HHG100	E 10UF, 50V	1	
C2382	ECA1CHG101	E 100UF, 16V	1	
C2401	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C2413	ECA1HHG470	E 47UF, 50V	1	
C2414	EEVHB1C470	E 47UF, 16V	1	
C2417	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C2419	EEVHB1C100	E 10UF, 16V	1	
C2422	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C2423	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C2426	ECJ2XB1H153K	C 0.015UF, K, 50V	1	
C2427	EEVHB1C100	E 10UF, 16V	1	
C2429	ECA1CHG101	E 100UF, 16V	1	
C2431	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C2433	ECJ2XB1H393K	C 0.039UF, K, 50V	1	
C2434	ECJ2XB1H223K	C 0.022UF, K, 50V	1	
C2435	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C2436	ECJ3XB1C105K	C 1UF, K, 16V	1	
C2437,38	ECA1CHG101	E 100UF, 16V	2	
C2440,41	ECJ3XF1C475Z	C 4.7UF, Z, 16V	2	
C2442	ECJ2VB1C224K	C 0.22UF, K, 16V	1	
C2450	EEVHB1C100	E 10UF, 16V	1	
C2451	EEVHB1E4R7	E 4.7UF, 25V	1	
C2452	ECJ2XB1H562K	C 5600PF, K, 50V	1	
C2453	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2454	EEVHB1E4R7	E 4.7UF, 25V	1	
C2457	EEVHB1E4R7	E 4.7UF, 25V	1	
C2458	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C2459	ECJ3XB1C105K	C 1UF, K, 16V	1	
C2460	ECJ2XB1H473K	C 0.047UF, K, 50V	1	
C2461	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C2463	ECJ2XB1H473K	C 0.047UF, K, 50V	1	
C2466,67	ECJ3XB1C105K	C 1UF, K, 16V	2	
C2480	ECJ2VB1C224K	C 0.22UF, K, 16V	1	
C2484	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C3711	EEVHB1A101	E 100UF, 10V	1	
C3712	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6401-08	ECJ2VF1C105Z	C 1UF, Z, 16V	8	
C6411	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C6412	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6417	ECJ2XB1H221K	C 220PF, K, 50V	1	
C6421	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C6422	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C6427	F1L2E1040002	E 1000UF, 25V	1	
C6429	F1L2E1040002	E 1000UF, 25V	1	
C6431	F1L2E1040002	E 1000UF, 25V	1	
C6433	F1L2E1040002	E 1000UF, 25V	1	
C6452	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6453	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6454	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6455	EEUFC1E221	E 220UF, 25V	1	
C6456	ECA2CM101	E 100UF, 160V	1	
C6458	ECJ4XB1E475M	C 4.7UF, M, 25V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6459	EEUFC1E470	E 47UF, 25V	1	
C6461	ECA1HM101	E 100UF, 50V	1	
C6462-65	ECJ4XB1E475M	C 4.7UF, M, 25V	4	
C6466	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6467	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C6468	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6469	EEUFC1E221	E 220UF, 25V	1	
C6470	ECA1HM221	E 220UF, 50V	1	
C6471	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6472	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6473	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6474	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6475	EEUFC1E221	E 220UF, 25V	1	
C6476	ECA2CM101	E 100UF, 160V	1	
C6478	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6481,82	F1K2J332A014	C 3300UF, K,6.3V	2	
C6485,86	F1K2J332A014	C 3300UF, K,6.3V	2	
C6490,91	ECJ3XK2J102K	C 1000PF, K,630V	2	
C6492	ECA2VHG100	E 10UF, 350V	1	
C6493	ECJ3XB2J222K	C 2200PF, K,630V	1	
C6501-08	ECJ2VF1C105Z	C 1UF, Z, 16V	8	
C6509	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C6511,12	ECJ4XB1E475M	C 4.7UF, M, 25V	2	
C6513	ECA2CM101	E 100UF, 160V	1	
C6521	EEUFC1E470	E 47UF, 25V	1	
C6523	ECA1VM470	E 47UF, 35V	1	
C6524,25	ECJ3FC2D102J	C 1000PF, J,200V	2	
C6526	ECA2EHG220	E 22UF, 250V	1	
C6529	ECJ3XK2J102K	C 1000PF, K,630V	1	
C6531,32	ECJ4XB1E475M	C 4.7UF, M, 25V	2	
C6534	ECJ3XK2J102K	C 1000PF, K,630V	1	
C6541	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6543,44	ECJ3FC2D102J	C 1000PF, J,200V	2	
C6546	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6547	ECJ3FC2D102J	C 1000PF, J,200V	1	
C6550	ECA2CM101	E 100UF, 160V	1	
C6571	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6575-78	ECJ2VF1C105Z	C 1UF, Z, 16V	4	
C6580,81	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C6584	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6585	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6588	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6589	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6590	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6591	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6598	ECA2CHG220	E 22UF, 160V	1	
C6601-04	ECA2DHG221	E 220UF, 200V	4	
C6607	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6608	ECA1EM471	E 470UF, 25V	1	
C6611	F1K2J332A014	C 3300UF, K,6.3V	1	
C6615-17	F1K2J332A014	C 3300UF, K,6.3V	3	
C6620	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C6621-28	ECQE2105RKB	P 1UF, 250V	8	
C6631,32	ECJ4XB1E475M	C 4.7UF, M, 25V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6633	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6634,35	ECJ4XB1E475M	C 4.7UF, M, 25V	2	
C6636	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6637	EEUFC1E121	E 120UF, 25V	1	
C6639	F2A2D1510004	E 150UF, 200V	1	
C6642	F1L2E1040002	E 1000UF, 25V	1	
C6644	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6645	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6646	F2A1V121A085	E 120UF, 35V	1	
C6647	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6650	ECQE2224KF	P 0.22UF, K,250V	1	
C6651,52	ECJ2XB1H103K	C 0.01UF, K, 50V	2	
C6655,56	EEUFC1A101	E 100UF, 10V	2	
C6660,61	ECJ3XK2J102K	C 1000PF, K,630V	2	
C6695,96	ECJ3XK2J102K	C 1000PF, K,630V	2	
C6701-04	F2A2D1510004	E 150UF, 200V	4	
C6707,08	EEUED2C470	E 47UF, 160V	2	
C6709	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C6712-14	F1K2J332A014	C 3300UF, K,6.3V	3	
C6717	F1K2J332A014	C 3300UF, K,6.3V	1	
C6721-28	ECQE2105RKB	P 1UF, 250V	8	
C6731,32	ECJ4XB1E475M	C 4.7UF, M, 25V	2	
C6733	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6734,35	ECJ4XB1E475M	C 4.7UF, M, 25V	2	
C6736	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6737	ECQE2224KF	P 0.22UF, K,250V	1	
C6739	F1L2E1040002	E 1000UF, 25V	1	
C6740	ECJ3XB2J222K	C 2200PF, K,630V	1	
C6741,42	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C6744	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6746	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6747	F2A2D1510004	E 150UF, 200V	1	
C6748	EEUFC1E221	E 220UF, 25V	1	
C6749	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6750,51	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C6753,54	EEUFC1E221	E 220UF, 25V	2	
C6755	ECJ3YB1E105K	C 1UF, K, 25V	1	
C6756	EEUFC1A101	E 100UF, 10V	1	
C6757	ECJ4XB1E475M	C 4.7UF, M, 25V	1	
C6760,61	ECJ3XK2J102K	C 1000PF, K,630V	2	
C6775	F1K2J332A014	C 3300UF, K,6.3V	1	
C6778	F1K2J332A014	C 3300UF, K,6.3V	1	
C7101	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7102	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7103-05	ECJ2VF1C105Z	C 1UF, Z, 16V	3	
C7107	F1K2A1040004	C 0.1UF, 100V	1	
C7111	F1K2A1040004	C 0.1UF, 100V	1	
C7113	F1K2A1040004	C 0.1UF, 100V	1	
C7115	F1K2A1040004	C 0.1UF, 100V	1	
C7142	ECJ1XC1H101J	C 100PF, J, 50V	1	
C7147	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7148	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7149	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7150	ECJ3XB0J106M	C 10UF, M,6.3V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7151	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7152	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7153-55	ECJ1XC1H101J	C 100PF, J, 50V	3	
C7201	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7202	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7203,04	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C7206	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7207	F1K2A1040004	C 0.1UF, 100V	1	
C7210	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7211	F1K2A1040004	C 0.1UF, 100V	1	
C7213	F1K2A1040004	C 0.1UF, 100V	1	
C7217	F1K2A1040004	C 0.1UF, 100V	1	
C7219	F1K2A1040004	C 0.1UF, 100V	1	
C7235	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7236	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7239	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7242-44	ECJ2VF1C105Z	C 1UF, Z, 16V	3	
C7246	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7250	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C7252-56	ECJ1XC1H101J	C 100PF, J, 50V	5	
C7406	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7505,06	EEUFC1E471	E 470UF, 25V	2	
C7509	ECA1HHG100	E 10UF, 50V	1	
C7511,12	EEUFC1E471	E 470UF, 25V	2	
C7513	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C7516	EEUFC1E471	E 470UF, 25V	1	
C7517	EEUFC1C821	E 820UF, 16V	1	
C7518	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C7521	EEUFC1E471	E 470UF, 25V	1	
C7522	EEUFC1C821	E 820UF, 16V	1	
C7523	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C7532	EEUFC1C331	E 330UF, 16V	1	
C7536,37	ECJ2VF1C474Z	C 0.47UF, Z, 16V	2	
C7541-44	ECJ2VF1C104Z	C 0.1UF, Z, 16V	4	
C7568	ECA1HHG220	E 22UF, 50V	1	
C7570	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C7573	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C7581	ECA1HHG4R7	E 4.7UF, 50V	1	
C7582	ECJ2VB1C224K	C 0.22UF, K, 16V	1	
C7583	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C7584	ECJ2XC1H271J	C 270PF, J, 50V	1	
C7585	EEUFC1H100L	E 10UF, 50V	1	
C9030,31	ECJ3XB0J106M	C 10UF, M,6.3V	2	
C9032,33	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9034,35	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C9036,37	ECJ3XB0J106M	C 10UF, M,6.3V	2	
C9038,39	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9040	ECJ2VB1E473K	C 0.047UF, K, 25V	1	
C9041	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9042,43	ECJ2VB1E473K	C 0.047UF, K, 25V	2	
C9044	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C9045,46	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9048,49	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9051	ECJ1XB1C393K	C 0.039UF, K, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9053	ECJ1VB1H392K	C 3900PF, K, 50V	1	
C9054-56	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9077	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9150	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9151	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9153	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9154	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9156	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9157-60	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C9161	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9162	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9163-70	ECJ1XF1C104Z	C 0.1UF, Z, 16V	8	
C9172-74	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9175	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9176	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9178-82	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C9183	ECJ1XC1H102J	C 1000PF, J, 50V	1	
C9186	ECJ1XC1H100D	C 10PF, D, 50V	1	
C9187	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9191	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9192	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C9195	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C9196	ECJ3XB1C105K	C 1UF, K, 16V	1	
C9197	ECJ2VB1E563K	C 0.056UF, K, 25V	1	
C9198	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C9199,00	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9207	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9301	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9302	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9303	EEVHB1C470	E 47UF, 16V	1	
C9304	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9305	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9307	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9308	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9309	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9310	ECJ1XC1H330J	C 33PF, J, 50V	1	
C9311	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9312,13	ECJ1XC1H330J	C 33PF, J, 50V	2	
C9314,15	ECJ3XF1C475Z	C 4.7UF, Z, 16V	2	
C9316	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9449	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9450	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9453	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9454,55	ECJ3XF1C475Z	C 4.7UF, Z, 16V	2	
C9465	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9466	EEVHB0G221	E 220UF, 4V	1	
C9467	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9468	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9470	ECJ1XC1H101J	C 100PF, J, 50V	1	
C9471	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9472	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9474	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9475-77	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9478	ECJ3XB0J106M	C 10UF, M,6.3V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9479-82	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C9485-93	ECJ1XF1C104Z	C 0.1UF, Z, 16V	9	
C9494,95	ECJ3XF1C475Z	C 4.7UF, Z, 16V	2	
C9496	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9598,99	ECJ1VF1H103Z	C 0.01UF, Z, 50V	2	
C9601-09	ECJ1XF1C104Z	C 0.1UF, Z, 16V	9	
C9611	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9612	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9613	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9615-25	ECJ1XF1C104Z	C 0.1UF, Z, 16V	11	
C9629-41	ECJ1XF1C104Z	C 0.1UF, Z, 16V	13	
C9700,01	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9702	EEVHB1C470	E 47UF, 16V	1	
C9703	ECJ1XC1H101J	C 100PF, J, 50V	1	
C9705	ECJ1XF1H102Z	C 1000PF, Z, 50V	1	
C9706,07	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9708-10	EEVHB1C470	E 47UF, 16V	3	
C9712-17	ECJ1XC1H101J	C 100PF, J, 50V	6	
C9718	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9719	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9720	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9722,23	ECJ1XC1H100D	C 10PF, D, 50V	2	
C9724	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9725	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9726	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9727,28	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9729	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9730-33	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C9737	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9739-41	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9742	EEVHB1C470	E 47UF, 16V	1	
C9743	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C9748,49	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9750	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9751,52	ECJ1VF1H103Z	C 0.01UF, Z, 50V	2	
C9753,54	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9755,56	ECJ1XF1H102Z	C 1000PF, Z, 50V	2	
C9759	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9760	ECJ1VB1C563K	C 0.056UF, K, 16V	1	
C9761,62	ECJ1XC1H330J	C 33PF, J, 50V	2	
C9763	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9765	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9766	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9767,68	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C9769	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9774,75	ECJ1XC1H330J	C 33PF, J, 50V	2	
C9951-53	EEVHB1C470	E 47UF, 16V	3	
C9954-56	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9957	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9958,59	F2H1E221A007	E 2.2UF, 25V	2	
C9960	ECJ3VB1C104K	C 0.10UF, K, 16V	1	
C9961	EEFUD0G121ER	120UF	1	
C9964,65	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C9966	EEVHB0G221	E 220UF, 4V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9967	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C9968	EEVHB1C470	E 47UF, 16V	1	
C9969	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C9970	ECJ2XB1E104K	C 0.1UF, K, 25V	1	
C9971	ECJ2XC1H222J	C 2200PF, J, 50V	1	
CB1-B7	K1MN80B00004	80P CONNECTOR	7	
CF901	ERZV10V621P2	VARISTOR	1	⚠
CF902	ERZV07D361	VARISTOR	1	⚠
D3	K1KA40A00140	40P CONNECTOR	1	
D4	K1KA12A00227	12 PIN PH (2.0MM)	1	
D10	K1KA12A00254	12P CONNECTOR	1	
D12	K1KA07A00189	7P CONNECTOR	1	
D20	K1KA20A00180	20P CONNECTOR	1	
D25	K1KA08A00293	8P CONNECTOR	1	
D27	K1KA09A00077	9P CONNECTOR	1	
D31,32	K1MN50B00026	50P CONNECTOR	2	
D300,01	MA152K	DIODE	2	MA3X152K
D302	LNH101WHKAF4	LED	1	
D303	MA152K	DIODE	1	MA3X152K
D308	MA8056M	ZENER DIODE	1	MAZ80560M
D309,10	MA152K	DIODE	2	MA3X152K
D401-03	MA152K	DIODE	3	MA3X152K
D404	S1WBA80Z	DIODE	1	⚠
D405	MA3082L	ZENER DIODE	1	MAZ30820L
D406	B0EAEV000001	DIODE	1	
D407	B0HCMM000001	DIODE	1	
D408	PC123FY2	PHOTO COUPLER	1	B3PAA0000012 ⚠
D409-11	B0HCMM000001	DIODE	3	
D412	MA3051M	ZENER DIODE	1	MAZ30510M
D413	MA3200M	ZENER DIODE	1	MAZ32000M
D451	B0FBBR000019	DIODE	1	⚠
D452	B0HCMM000001	DIODE	1	
D453	MA3270M	ZENER DIODE	1	MAZ32700M
D454	B0HCMM000001	DIODE	1	
D457	B0HARR000016	DIODE	1	
D458,59	MA3270M	ZENER DIODE	2	MAZ32700M
D460	MA3100L	ZENER DIODE	1	
D462	B0EAKT000012	DIODE	1	
D463	M1FS4	DIODE	1	
D550	B0HCMM000001	DIODE	1	
D551,52	B0BA02700021	DIODE	2	
D553-56	B0HCMM000001	DIODE	4	
D557,58	B0BA01000046	DIODE	2	
D559	B0HCMM000001	DIODE	1	
D560	RC3B2LFU1	DIODE	1	
D561,62	B0HCMM000001	DIODE	2	
D563	RC3B2LFU1	DIODE	1	
D564	B0HCMM000001	DIODE	1	
D565,66	PC123FY2	PHOTO COUPLER	2	B3PAA0000012 ⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D567	B0HARR000009	DIODE	1	
D568	B0HFRJ000012	DIODE	1	
D570	B0HARR000009	DIODE	1	
D571	MA3056M	ZENER DIODE	1	MAZ30560M
D572	B0HCMM000001	DIODE	1	
D573,74	B0HFRJ000012	DIODE	2	
D575	M1FS4	DIODE	1	
D576	B0HCMM000001	DIODE	1	
D577-84	MA152K	DIODE	8	MA3X152K
D585	MA3056M	ZENER DIODE	1	MAZ30560M
D586	B0HCMM000001	DIODE	1	
D587	M1FS4	DIODE	1	
D589	B0HCMM000001	DIODE	1	
D590	MA152K	DIODE	1	MA3X152K
D592,93	B0HCMM000001	DIODE	2	
D594	MA3056M	ZENER DIODE	1	MAZ30560M
D595	MA152K	DIODE	1	MA3X152K
D596	MA3051M	ZENER DIODE	1	MAZ30510M
D650	B0HCMM000001	DIODE	1	
D652	B0HCMM000001	DIODE	1	
D654	MA3056M	ZENER DIODE	1	MAZ30560M
D660	B0HFRJ000012	DIODE	1	
D661	MA152K	DIODE	1	MA3X152K
D2301,02	M1FS4	DIODE	2	
D2310-13	MA152K	DIODE	4	MA3X152K
D2316	M1FS4	DIODE	1	
D3715	MA3110M	ZENER DIODE	1	MAZ31100M
D3716,17	MA3100L	ZENER DIODE	2	
D3719	MA3100L	ZENER DIODE	1	
D3764	MA3110M	ZENER DIODE	1	MAZ31100M
D3766	MA3110M	ZENER DIODE	1	MAZ31100M
D6401-03	MA8056H	ZENER DIODE	3	MAZ80560H
D6405	D1FL40F4063	DIODE	1	B0ECHP000001
D6406,07	MA8056H	ZENER DIODE	2	MAZ80560H
D6409-12	D1FL40F4063	DIODE	4	B0ECHP000001
D6451	M1FS4	DIODE	1	
D6453	MA111	DIODE	1	MA2J111
D6454	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6455	MA111	DIODE	1	MA2J111
D6456	D1FL40F4063	DIODE	1	B0ECHP000001
D6458	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6459	MA111	DIODE	1	MA2J111
D6460,61	B0HCKS000001	DIODE	2	
D6462	M1FS4	DIODE	1	
D6463	MA8056H	ZENER DIODE	1	MAZ80560H
D6464	M1FS4	DIODE	1	
D6465,66	MA8330M	ZENER DIODE	2	MAZ83300M
D6467	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6468	MA111	DIODE	1	MA2J111
D6469	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6470	MA111	DIODE	1	MA2J111
D6473	MA111	DIODE	1	MA2J111
D6474	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6475	MA111	DIODE	1	MA2J111

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D6476	D1FL40F4063	DIODE	1	B0ECHP000001
D6477	MA111	DIODE	1	MA2J111
D6478	B0HCKS000001	DIODE	1	
D6479	MA111	DIODE	1	MA2J111
D6480	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6481,82	MA8330M	ZENER DIODE	2	MAZ83300M
D6483-90	MA8056H	ZENER DIODE	8	MAZ80560H
D6491-94	D1FL40F4063	DIODE	4	B0ECHP000001
D6495	B0HCKS000001	DIODE	1	
D6496	M1FS4	DIODE	1	
D6501-08	K7GBZEE00006	DIODE	8	
D6509	MA111	DIODE	1	MA2J111
D6511	B0HCMM000009	DIODE	1	
D6512-14	MA111	DIODE	3	MA2J111
D6515	MA8240M	ZENER DIODE	1	MAZ82400M
D6516	MA111	DIODE	1	MA2J111
D6517	TLP181	PHOTO COUPLER	1	B3PBA0000081
D6519	MA111	DIODE	1	MA2J111
D6520	B0JCKG000001	DIODE	1	
D6521	D1FL40F4063	DIODE	1	B0ECHP000001
D6522	MA111	DIODE	1	MA2J111
D6523	D1FL40F4063	DIODE	1	B0ECHP000001
D6524	MA8051L	ZENER DIODE	1	MAZ80510L
D6525	MA111	DIODE	1	MA2J111
D6526	B0HCMM000009	DIODE	1	
D6527	MA111	DIODE	1	MA2J111
D6529	M1FS4	DIODE	1	
D6541	B0HCKS000001	DIODE	1	
D6542	MA111	DIODE	1	MA2J111
D6543	MA8051L	ZENER DIODE	1	MAZ80510L
D6544	MA111	DIODE	1	MA2J111
D6545	MA8051L	ZENER DIODE	1	MAZ80510L
D6546-48	MA8330M	ZENER DIODE	3	MAZ83300M
D6549,50	MA111	DIODE	2	MA2J111
D6551	M1FS4	DIODE	1	
D6552,53	MA111	DIODE	2	MA2J111
D6570	B0HCMM000009	DIODE	1	
D6572	D1FL40F4063	DIODE	1	B0ECHP000001
D6582	MA8051L	ZENER DIODE	1	MAZ80510L
D6583	LNJ201LPQJA	LED	1	
D6584	MA111	DIODE	1	MA2J111
D6585,86	MA8330M	ZENER DIODE	2	MAZ83300M
D6611,12	M1FS4	DIODE	2	
D6615	D1FL40F4063	DIODE	1	B0ECHP000001
D6620-22	SF20LC30F10	DIODE	3	
D6624	SF20LC30F10	DIODE	1	
D6629	B0HBSM000031	DIODE	1	
D6635	MA8051L	ZENER DIODE	1	MAZ80510L
D6636	MA111	DIODE	1	MA2J111
D6637	D1FL40F4063	DIODE	1	B0ECHP000001
D6640	D1FL40F4063	DIODE	1	B0ECHP000001
D6641,42	M1FS4	DIODE	2	
D6645-47	D1FL40F4063	DIODE	3	B0ECHP000001
D6711,12	M1FS4	DIODE	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D6715	D1FL40F4063	DIODE	1	B0ECHP000001
D6720-22	SF20LC30F10	DIODE	3	
D6724	SF20LC30F10	DIODE	1	
D6729	B0HBSM000031	DIODE	1	
D6735	MA8051L	ZENER DIODE	1	MAZ80510L
D6736	MA111	DIODE	1	MA2J111
D6737	D1FL40F4063	DIODE	1	B0ECHP000001
D6740,41	D1FL40F4063	DIODE	2	B0ECHP000001
D6750,51	D1FL40F4063	DIODE	2	B0ECHP000001
D6752,53	M1FS4	DIODE	2	
D6754	D1FL40F4063	DIODE	1	B0ECHP000001
D6755	M1FS4	DIODE	1	
D6757	D1FL40F4063	DIODE	1	B0ECHP000001
D6758,59	MA111	DIODE	2	MA2J111
D6762	MA111	DIODE	1	MA2J111
D6763	MA8051L	ZENER DIODE	1	MAZ80510L
D6764	MA111	DIODE	1	MA2J111
D6765	LNJ201LPQJA	LED	1	
D6766,67	MA8330M	ZENER DIODE	2	MAZ83300M
D6768	MA111	DIODE	1	MA2J111
D6769	LNJ201LPQJA	LED	1	
D7201-04	MA152K	DIODE	4	MA3X152K
D7504	MA737	DIODE	1	MA2Q737
D7505	MA2120A	ZENER DIODE	1	MAZ21200A
D7507	MA737	DIODE	1	MA2Q737
D7508	MA2068A	ZENER DIODE	1	
D7511	MA2068A	ZENER DIODE	1	
D7512	MA737	DIODE	1	MA2Q737
D7513	MA2051A	ZENER DIODE	1	MAZ20510A
D7515	MA737	DIODE	1	MA2Q737
D7537,38	MA111	DIODE	2	MA2J111
D7539	MA3062H	ZENER DIODE	1	MAZ30620H
D7540	MA3039H	ZENER DIODE	1	MAZ30390H
D7541,42	MA111	DIODE	2	MA2J111
D7544,45	MA111	DIODE	2	MA2J111
D7546	MA152	DIODE	1	
D7547	MA111	DIODE	1	MA2J111
D7549	MA111	DIODE	1	MA2J111
D7581	MA111	DIODE	1	MA2J111
D7582	MA3X78900L	ZENER DIODE	1	
D9705-13	MA3062M	ZENER DIODE	9	MAZ30620M
D9715	MA3062M	ZENER DIODE	1	MAZ30620M
D9716	MA111	DIODE	1	MA2J111
D9719,20	MA3062M	ZENER DIODE	2	MAZ30620M
D9723	MA3062M	ZENER DIODE	1	MAZ30620M
D9724	MA111	DIODE	1	MA2J111
D9727	MA152K	DIODE	1	MA3X152K
D9730	MA152K	DIODE	1	MA3X152K
D9769	MA152K	DIODE	1	MA3X152K
D9771	MA152K	DIODE	1	MA3X152K
D9952	M1FS4	DIODE	1	
D9953	MA152K	DIODE	1	MA3X152K
D9954	M1FS4	DIODE	1	
D9955	B0JCPD000010	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
F900-1,-2	EYF-52BC	FUSE HOLDER	2	
F901-1,-2	EYF-52BC	FUSE HOLDER	2	
G5	K1KA06B00117	6P CONNECTOR	1	
G7	K1MN28B00056	28P CONNECTOR	1	
G18	K1KA06B00049	6P CONNECTOR	1	
IC300	B3L000000017	IC	1	
IC401	MIP2E1DMY1TV	IC	1	
IC402	AN1431T	LINEAR IC	1	
IC403	AN7705F	LINEAR IC	1	
IC451	C0DABZG00001	IC	1	
IC550	UPC24M18AHF	LINEAR IC	1	C0CAAME00003
IC551	C5HABZZ00115	IC	1	
IC552	C5HABZZ00080	IC	1	
IC553,54	AN1431T	LINEAR IC	2	
IC555	C0DAAHG00007	IC	1	
IC557,58	AN1431T	LINEAR IC	2	
IC2301,02	C1BA00000309	IC	2	
IC2304	AN7709SP	IC	1	
IC2401	C1BA00000302	IC	1	
IC6401-08	C0HBC0000005	IC	8	
IC6451	AN1431M	LINEAR IC	1	
IC6452,53	AN78L15M	LINEAR IC *	2	
IC6454,55	AN78L05M	LINEAR IC	2	
IC6456	AN1431M	LINEAR IC	1	
IC6471,72	AN1431M	LINEAR IC	2	
IC6491	AN1431M	LINEAR IC	1	
IC6501,02	C0JBAB000417	IC	2	
IC6510	AN78L05M	LINEAR IC	1	
IC6511	C0ZBZ0000735	IC	1	
IC6512	AN78L05M	LINEAR IC	1	
IC6521	C0ZBZ0000735	IC	1	
IC6541,42	C0ZBZ0000735	IC	2	
IC6581	AN6914S	LINEAR IC *	1	
IC6601-03	C0ZBZ0000138	IC	3	
IC6604	AN1431M	LINEAR IC	1	
IC6605,06	C0JBAZ000005	IC	2	
IC6607	C0JBAA000195	IC	1	
IC6701-03	C0ZBZ0000138	IC	3	
IC6704	C0ZBZ0000735	IC	1	
IC6705	AN6914S	LINEAR IC *	1	
IC6706	C0JBAZ000005	IC	1	
IC6711	AN1431M	LINEAR IC	1	
IC7101	C0JBAZ001604	IC	1	
IC7104-06	C0JBAZ001604	IC	3	
IC7201-04	C0JBAZ001604	IC	4	
IC7502-05	C0DAAZG00006	IC	4	
IC7581	C0DBAMA00014	IC	1	
IC9006,07	C0CBCBD00008	IC	2	
IC9009	C0FBAD000069	IC	1	
IC9023	C0JBAZ000855	IC	1	
IC9151	MN845041-A	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC9152,53	C0CBCBD00008	IC	2	
IC9155	C3ABPJ000017	IC	1	
IC9157	C0ABFA000012	IC	1	
IC9301	C1ZBZ0002358	IC	1	
IC9302	C0CBCBD00008	IC	1	
IC9303	C1ZBZ0002357	IC	1	
IC9453	C0DBEZG00004	IC	1	
IC9454	C3ABPJ000043	IC	1	
IC9455	MN84510-A	IC	1	
IC9456	TVRJ952	IC	1	
IC9459	C0JBAZ001992	IC	1	
IC9601	C0JBAZ001604	IC	1	
IC9602	C0JBAZ000855	IC	1	
IC9603,04	C0JBAZ001604	IC	2	
IC9605	C1ZBZ0002329	IC	1	
IC9606	C0EBE0000066	IC	1	
IC9608	C0ZBZ0000764	IC	1	
IC9701	MN102L230	IC	1	
IC9702	C3EBJC000038	IC	1	
IC9703	C0JBAZ001604	IC	1	
IC9704	C3HAHC000006	IC	1	
IC9705	TVRJ951	IC	1	
IC9706	C0JBAZ000855	IC	1	
IC9707	C0JBAE000283	IC	1	
IC9708	C3EBGC000018	IC	1	
IC9709	TVRJ950-1	IC	1	
IC9710	C0EBB0000024	IC	1	
IC9711	C0JBAS000109	IC	1	
IC9951	C0DBAMH00006	IC	1	
IC9952	C0DBAFH00021	IC	1	
JK3709	K1FB315A0001	CONNECTOR	1	
JK3714	K4BK29A00005	PHONO PIN TERMINAL	1	
JK7001-03	K4ZZ01000121	EARTH LUG	3	
JK7004	TJC6137	EARTH LUG	1	
JK7006	K4ZZ01000121	EARTH LUG	1	
JS301,02	ERJ8GEY0R00	M 0 OHM, 1/8W	2	
JS304	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS307-11	ERJ8GEY0R00	M 0 OHM, 1/8W	5	
JS2101	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
JS2106,07	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS2301	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS2304	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS2307,08	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS3705,06	ERJ8GEY0R00	M 0 OHM, 1/8W	2	
JS3712	ERJ8GEY0R00	M 0 OHM, 1/8W	1	
JS7525	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS7528	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
K5	K1KA06A00220	6P CONNECTOR	1	
K9	K1KA06A00220	6P CONNECTOR	1	
K12	K1KA09A00099	9P CONNECTOR	1	
K24	K1KA08B00005	8P CONNECTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
K34	K1KA03B00107	3P CONNECTOR	1	
L401	ELEXT100KA	PEAKING COIL	1	
L451	G4D4A0000048	SWITCHING TRANSFORMER	1	
L452	EXCELDR35C	BEAD CHOKE	1	
L554	TALFP15B221K	INDUCTION COIL	1	G0A221GA0001
L2301,02	TAL10RP221LB	INDUCTION COIL	2	G0ZZ00001909
L2303,04	ERD25V0T	M OHM, 1/10W	2	
L2306	ELJPA100KB	CHIP INDUCTOR	1	
L3778-80	TSK1040	FERRITE CORE	3	G1BYYYH00004
L6451	J0JJC0000021	CHIP INDUCTOR	1	
L6453	J0JJC0000021	CHIP INDUCTOR	1	
L6471	J0JJC0000021	CHIP INDUCTOR	1	
L6472	G0ZZ00002183	PEAKING COIL	1	
L6602	G0ZZ00002183	PEAKING COIL	1	
L6604,05	G0ZZ00002183	PEAKING COIL	2	
L6611,12	ELC16BR82L	CHOKE COIL	2	⚠
L6615,16	ELC16BR82L	CHOKE COIL	2	⚠
L6618	J0JJC0000021	CHIP INDUCTOR	1	
L6620-28	G0ZZ00002183	PEAKING COIL	9	
L6634-38	G0ZZ00002183	PEAKING COIL	5	
L6644,45	G0ZZ00002183	PEAKING COIL	2	
L6647,48	J0JJC0000021	CHIP INDUCTOR	2	
L6702-04	G0ZZ00002183	PEAKING COIL	3	
L6705	G0C101K00023	PEAKING COIL	1	
L6711-14	ELC16BR82L	CHOKE COIL	4	⚠
L6717,18	J0JJC0000021	CHIP INDUCTOR	2	
L6719-23	G0ZZ00002183	PEAKING COIL	5	
L6726,27	G0ZZ00002183	PEAKING COIL	2	
L6736,37	G0ZZ00002183	PEAKING COIL	2	
L6744,45	G0ZZ00002183	PEAKING COIL	2	
L6747	J0JJC0000021	CHIP INDUCTOR	1	
L6750	G0ZZ00002183	PEAKING COIL	1	
L7106	ELKE103FA	NOISE FILTER	1	
L7207-09	ELKE103FA	NOISE FILTER	3	
L7504	G0C101K00023	PEAKING COIL	1	
L7505	G0A101ZA0038	CHOKE COIL	1	
L7506	ELESE330JA	PEAKING COIL	1	
L7507	G0C101K00023	PEAKING COIL	1	
L7508	G0A101ZA0038	CHOKE COIL	1	
L7509	ELESE330JA	PEAKING COIL	1	
L7510	G0C101K00023	PEAKING COIL	1	
L7511	G0A101ZA0038	CHOKE COIL	1	
L7512	G0A220GA0002	CHOKE COIL	1	
L7513	G0C101K00023	PEAKING COIL	1	
L7514	G0A101ZA0038	CHOKE COIL	1	
L7515	G0A220GA0002	CHOKE COIL	1	
L7581	ELESE330JA	PEAKING COIL	1	
L7582	G1C101M00018	INDUCTION COIL	1	
L9452	ELJFA1R0KF	CHIP COIL	1	
L9459	ELKE103FA	NOISE FILTER	1	
L9701	ELKE103FA	NOISE FILTER	1	
L9951-54	ELKE103FA	NOISE FILTER	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L9955	G1C470M00012	INDUCTOR COIL	1	
L9956	G1C1R5Z00002	INDUCTOR COIL	1	
LF904	G0B123K00001	CHOKE COIL	1	⚠
LF909	G0B123K00001	CHOKE COIL	1	⚠
LF915	G0B123K00001	CHOKE COIL	1	⚠
P2	K1KA06A00180	6P CONNECTOR	1	
P5	K1KA11A00073	11P CONNECTOR	1	
P7	TJS1A8800	4P CONNECTOR	1	K1KA04A00242
P9	K1KA02A00244	2P CONNECTOR	1	
P10	TJS1A8810	5P CONNECTOR	1	K1KA05A00177
P11	K1KA07A00096	7P CONNECTOR	1	
P12	K1KA05A00139	5P CONNECTOR	1	
P23	K1KA03A00213	3P CONNECTOR	1	
P25	TJS1A8840	8P CONNECTOR	1	K1KA08A00221
P27	TJS1A8850	9P CONNECTOR	1	K1KA09A00099
PA2	K1KA40A00140	40P CONNECTOR	1	
PA3	K1KA04A00195	4P CONNECTOR	1	
PA4	K1KA12A00227	12 PIN PH (2.0MM)	1	
PA5	K1KA11A00073	11P CONNECTOR	1	
PA6	K1KA20A00180	20P CONNECTOR	1	
PA7	K1KA04A00242	4P CONNECTOR	1	
PA8	K1KA20A00180	20P CONNECTOR	1	
PA9	K1KA06A00220	6P CONNECTOR	1	
PA12	K1KA07A00189	7P CONNECTOR	1	
PA21	K1KA07A00189	7P CONNECTOR	1	
PA22	K1KA12A00227	12 PIN PH (2.0MM)	1	
PA23	TJS3A9880	8P CONNECTOR	1	K1KA08A00179
PA24	K1KA07A00096	7P CONNECTOR	1	
PF1,F2	K1KA03A00181	3P CONNECTOR	2	
Q300,01	2SD601A	TRANSISTOR	2	2SD0601A
Q305	2SD601A	TRANSISTOR	1	2SD0601A
Q401-04	2SC3311A	TRANSISTOR	4	2SC3311AW
Q405	B1CBGD000001	TRANSISTOR	1	
Q406	2SC3311A	TRANSISTOR	1	2SC3311AW
Q451	B1DEGR000021	TRANSISTOR	1	
Q452	2SD2177R	TRANSISTOR	1	
Q453	2SB1434R	TRANSISTOR	1	2SB14340RA
Q454	B1DEGR000021	TRANSISTOR	1	
Q455,56	2SC3311A	TRANSISTOR	2	2SC3311AW
Q457	2SA1309A	TRANSISTOR	1	2SA13090WA
Q552	B1DEGQ000019	FET	1	
Q553	2SB621A	TRANSISTOR	1	2SB0621AW
Q554,55	2SC3311A	TRANSISTOR	2	2SC3311AW
Q557,58	2SC3311A	TRANSISTOR	2	2SC3311AW
Q650,51	2SC3311A	TRANSISTOR	2	2SC3311AW
Q2301,02	2SD1266A	TRANSISTOR	2	2SD1266AJ
Q2303-06	2SD601A	TRANSISTOR	4	2SD0601A
Q2308-12	2SD601A	TRANSISTOR	5	2SD0601A

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q2402,03	2SD601A	TRANSISTOR	2	2SD0601A
Q2406	2SD601A	TRANSISTOR	1	2SD0601A
Q2408	2SD601A	TRANSISTOR	1	2SD0601A
Q2410	2SD601A	TRANSISTOR	1	2SD0601A
Q6401	2SK620	FET	1	2SK0620
Q6451	B1BBCJ000003	TRANSISTOR	1	
Q6452	2SB709A	TRANSISTOR	1	2SB0709A
Q6454	2SD814A	TRANSISTOR	1	
Q6455	2SD601A	TRANSISTOR	1	2SD0601A
Q6461	B1BBCJ000003	TRANSISTOR	1	
Q6462	2SB709A	TRANSISTOR	1	2SB0709A
Q6463	2SD601A	TRANSISTOR	1	2SD0601A
Q6471	B1BBCJ000003	TRANSISTOR	1	
Q6472	2SB709A	TRANSISTOR	1	2SB0709A
Q6474	2SD814A	TRANSISTOR	1	
Q6475-77	2SD601A	TRANSISTOR	3	2SD0601A
Q6491,92	2SC1473A	TRANSISTOR	2	2SC1473AE
Q6501-04	2SK620	FET	4	2SK0620
Q6511,12	B1DFGL000005	TRANSISTOR	2	
Q6520	2SD601A	TRANSISTOR	1	2SD0601A
Q6521	B1DFES000001	TRANSISTOR	1	
Q6522-27	2SK2993	FET	6	
Q6530	2SB1073001TV	TRANSISTOR	1	
Q6541	2SB1073001TV	TRANSISTOR	1	
Q6542-47	2SK373100L	TRANSISTOR	6	
Q6550	2SC1473A	TRANSISTOR	1	2SC1473AE
Q6551	2SD601A	TRANSISTOR	1	2SD0601A
Q6552	B1DFES000001	TRANSISTOR	1	
Q6553	2SB1073001TV	TRANSISTOR	1	
Q6554	2SD2185R	TRANSISTOR	1	2SD21850R
Q6555	B1DFES000001	TRANSISTOR	1	
Q6581	2SD601A	TRANSISTOR	1	2SD0601A
Q6601,02	2SK3652000SB	TRANSISTOR	2	
Q6603,04	2SK620	FET	2	2SK0620
Q6605,06	2SK3652000SB	TRANSISTOR	2	
Q6611	2SD2185R	TRANSISTOR	1	2SD21850R
Q6612	2SB1073001TV	TRANSISTOR	1	
Q6613	2SD2185R	TRANSISTOR	1	2SD21850R
Q6614	2SB1073001TV	TRANSISTOR	1	
Q6621	2SK3637000VE	TRANSISTOR	1	
Q6624	2SK3637000VE	TRANSISTOR	1	
Q6641,42	B1DFHM000002	TRANSISTOR	2	
Q6671	2SB940A	TRANSISTOR	1	2SB0940AJ
Q6672	2SC1473A	TRANSISTOR	1	2SC1473AE
Q6673	2SD1263ALB	TRANSISTOR	1	
Q6701,02	2SK3652000SB	TRANSISTOR	2	
Q6705,06	2SK3652000SB	TRANSISTOR	2	
Q6711	2SD2185R	TRANSISTOR	1	2SD21850R
Q6712	2SB1073001TV	TRANSISTOR	1	
Q6713	2SD2185R	TRANSISTOR	1	2SD21850R
Q6714	2SB1073001TV	TRANSISTOR	1	
Q6721	2SK3637000VE	TRANSISTOR	1	
Q6724	2SK3637000VE	TRANSISTOR	1	
Q6725	2SK620	FET	1	2SK0620

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q6741,42	B1DFHM000002	TRANSISTOR	2	
Q6745,46	2SK326800L	FET	2	
Q6751	2SD1263ALB	TRANSISTOR	1	
Q6752,53	2SC1473A	TRANSISTOR	2	2SC1473AE
Q6756	2SD601A	TRANSISTOR	1	2SD0601A
Q7201,02	2SB709A	TRANSISTOR	2	2SB0709A
Q7501	B1DHDD000012	TRANSISTOR	1	
Q7502	UN2214	TRANSISTOR	1	UNR2214
Q7504	UN2214	TRANSISTOR	1	UNR2214
Q7509	2SD601A	TRANSISTOR	1	2SD0601A
Q7510	UN2214	TRANSISTOR	1	UNR2214
Q7541-43	2SB709A	TRANSISTOR	3	2SB0709A
Q7544	2SD601A	TRANSISTOR	1	2SD0601A
Q7581	UN5211	TRANSISTOR	1	UNR5211
Q7582	B1ABPF000005	TRANSISTOR	1	
Q9301	2SD601A	TRANSISTOR	1	2SD0601A
Q9400	2SD601A	TRANSISTOR	1	2SD0601A
Q9596-99	2SD601A	TRANSISTOR	4	2SD0601A
Q9601,02	2SD601A	TRANSISTOR	2	2SD0601A
Q9701	2SD601A	TRANSISTOR	1	2SD0601A
Q9702	2SB14400	TRANSISTOR	1	
Q9703,04	2SK620	FET	2	2SK0620
Q9706	2SK620	FET	1	2SK0620
Q9707	2SB709A	TRANSISTOR	1	2SB0709A
Q9708,09	2SD601A	TRANSISTOR	2	2SD0601A
Q9710	2SB709A	TRANSISTOR	1	2SB0709A
Q9714-16	2SD601A	TRANSISTOR	3	2SD0601A
Q9719	2SK620	FET	1	2SK0620
R300	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R301	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R302	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R304	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R306	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R310	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R311	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R312	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R313	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R314	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R317	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R320	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R402	ERF10TK3R3	W 3.3 OHM, 10W	1	
R404	ERF10TK3R3	W 3.3 OHM, 10W	1	
R406	ERU5TAJ150	F 15 OHM, 5W	1	⚠
R407	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R408	ERJ6GEYJ6R8	M 6.8 OHM,J,1/10W	1	
R409	ERG1FJS104D	M 100KOHM, J, 1W	1	
R410	ERJ6GEYJ6R8	M 6.8 OHM,J,1/10W	1	
R411	ERDS1FJ101	C 100 OHM, J,1/2W	1	
R412	ERDS1FJ221	C 220 OHM, J,1/2W	1	
R413	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R414	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R415	ERJ6ENF3901	M 3.9KOHM, 1/10W	1	
R416	ERJ6ENF2551	M2.55KOHM, 1/10W	1	

[illegible]	[illegible]	[illegible]	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R417	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R418	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R420-22	ERJ6GEYJ103	M 10KOHM,J,1/10W	3	
R423	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R424,25	ERJ6GEYJ473	M 47KOHM,J,1/10W	2	
R426,27	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R428	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R429-31	ERJ6ENF3303	M 330KOHM, 1/10W	3	
R432	ERJ6ENF1003	M 100KOHM, 1/10W	1	
R433-35	ERJ6ENF3303	M 330KOHM, 1/10W	3	
R436	ERJ6ENF1202	M 12KOHM, 1/10W	1	
R451	ERDS1FJ274	C 270KOHM, J,1/2W	1	
R452	ERDS1FJ224	C 220KOHM, J,1/2W	1	
R453	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R454,55	ERG3FJS333D	M 33KOHM, J, 3W	2	
R456	ERDS1FJ2R7	C 2.7 OHM, J,1/2W	1	
R457,58	ERF5EKR15	W0.15 OHM, 5W	2	
R459	ERJ6GEYJ270	M 27 OHM,J,1/10W	1	
R460	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R461	ERJ6GEYF563	M 56KOHM,F,1/10W	1	
R462	ERG1FJS101D	M 100 OHM, J, 1W	1	
R463	ERDS1FJ220	C 22 OHM, J,1/2W	1	
R464	ERDS1FJ103	C 10KOHM, J,1/2W	1	
R465	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R466	ERJ6ENF2703	M 270KOHM, 1/10W	1	
R467	ERDS1FJ220	C 22 OHM, J,1/2W	1	
R468	ERDS1FJ103	C 10KOHM, J,1/2W	1	
R469	ERDS1FJ221	C 220 OHM, J,1/2W	1	
R470	ERJ6ENF5602	M 56KOHM, 1/10W	1	
R471	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R472-74	ERJ6ENF3303	M 330KOHM, 1/10W	3	
R476	ERJ6ENF3601	M 3.6KOHM, 1/10W	1	
R477	ERJ6ENF4020	M 402 OHM, 1/10W	1	
R478-80	ERJ6ENF3303	M 330KOHM, 1/10W	3	
R481	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R482	ERJ6ENF4220	M 422 OHM, 1/10W	1	
R483	ERG2FJS104D	M 100KOHM, J, 2W	1	
R484	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R485	ERG1FJS393D	M 39KOHM, J, 3W	1	
R486	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R487	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R488	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R489	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R490	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R491,92	ERJ6GEYJ223	M 22KOHM,J,1/10W	2	
R493	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R502,03	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	2	
R504	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R550	ERX1FJSR56D	M0.56 OHM, J, 1W	1	
R551	ERG2FJS104D	M 100KOHM, J, 2W	1	
R552	ER0S2CKF1053	M 105KOHM, F,1/4W	1	EROS2CKF1053
R553	ERG2FJS104D	M 100KOHM, J, 2W	1	
R554	ER0S2CKF1053	M 105KOHM, F,1/4W	1	EROS2CKF1053
R555	ERJ6ENF2491	M2.49KOHM, 1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R556	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R557,58	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	2	
R560	ERX1FJSR56D	M0.56 OHM, J, 1W	1	
R561	ERJ6ENF1212	M12.1KOHM, 1/10W	1	
R563	ERG3FJS683D	M 68KOHM, J, 3W	1	
R564,65	ERJ6GEYJ681	M 680 OHM,J,1/10W	2	
R568	ERX1FJSR56D	M0.56 OHM, J, 1W	1	
R569	ERX2FJSR47D	M 0.47OHM, J, 2W	1	
R571	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R572	ERG3FJS683D	M 68KOHM, J, 3W	1	
R573	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R574	ERX1FJSR56D	M0.56 OHM, J, 1W	1	
R575	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R576	ERX2FJSR47D	M 0.47OHM, J, 2W	1	
R577,78	ERG3FJS683D	M 68KOHM, J, 3W	2	
R579,80	ERDS1FJ220	C 22 OHM, J,1/2W	2	
R581,82	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R583,84	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R585,86	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R587	ERDS1FJ220	C 22 OHM, J,1/2W	1	
R588	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R589	ERJ6ENF4992	M49.9KOHM, 1/10W	1	
R590	EVMEASA00B14	CONTROL 10KOHMB 0.3W	1	
R591	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R592	ERG1FJS222D	M 2.2KOHM, J, 1W	1	
R593	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R594	ERDS1FJ220	C 22 OHM, J,1/2W	1	
R595	ERDS1FJ471	C 470 OHM, J,1/2W	1	
R596	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R597,98	ERDS1FJ224	C 220KOHM, J,1/2W	2	
R599	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R600	ERDS1FJ224	C 220KOHM, J,1/2W	1	
R601	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R602	ERJ6ENF4642	M46.4KOHM, 1/10W	1	
R603,04	ERJ6ENF4992	M49.9KOHM, 1/10W	2	
R605	EVMEASA00B54	CONTROL 50KOHMB 0.3W	1	
R606	ERJ6ENF2551	M2.55KOHM, 1/10W	1	
R607	ERJ6GEYJ151	M 150 OHM,J,1/10W	1	
R608	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R609	ERJ6ENF1212	M12.1KOHM, 1/10W	1	
R610	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R611	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R612	ERJ6ENF2551	M2.55KOHM, 1/10W	1	
R613	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R614	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R615,16	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R617	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R618	ERJ6GEYJ680	M 68 OHM,J,1/10W	1	
R619	ERJ12YJ472	M 4.7KOHM,J, 1/2W	1	
R620	ERJ6GEYJ680	M 68 OHM,J,1/10W	1	
R621	ERJ12YJ472	M 4.7KOHM,J, 1/2W	1	
R623	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R625,26	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R627	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R628	ERDS1FJ470	C 47 OHM, J,1/2W	1	
R630	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R631	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R635	ERJ6ENF2551	M2.55KOHM, 1/10W	1	
R650	ERG1FJS222D	M 2.2KOHM, J, 1W	1	
R652	ERDS1FJ220	C 22 OHM, J,1/2W	1	
R653	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R654	ERJ6GEYJ560	M 56 OHM,J,1/10W	1	
R655	ERDS1FJ472	C 4.7KOHM, J,1/2W	1	
R656,57	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R901,02	ERC12ZGK105	S 1MOHM, K,1/2W	2	⚠
R2301,02	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R2303,04	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R2305,06	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	2	
R2307,08	ERJ6GEYJ271	M 270 OHM,J,1/10W	2	
R2309,10	ERDS1FJ100	C 10 OHM, J,1/2W	2	
R2311-16	ERDS1FJ2R2	C 2.2 OHM, J,1/2W	6	
R2317,18	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R2319,20	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R2346,47	ERJ6GEYJ123	M 12KOHM,J,1/10W	2	
R2348	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2371	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R2372	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2373	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R2374	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2375	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2376	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2377	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R2378	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2386	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2387	ERJ6GEYJ561	M 560 OHM,J,1/10W	1	
R2389	ERJ6GEYJ561	M 560 OHM,J,1/10W	1	
R2390	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2391	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2392	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2393	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2394	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2395	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2396,97	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R2398	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2399	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2401-04	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R2405,06	ERJ6GEYJ561	M 560 OHM,J,1/10W	2	
R2431	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R2434	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2438	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R2439	ERJ6GEYJ563	M 56KOHM,J,1/10W	1	
R2440	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2441	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R2445	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R2448	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2450	ERJ6GEYJ563	M 56KOHM,J,1/10W	1	
R2452	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2453	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	

[illegible]	[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2456	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2457	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R2460	ERJ6ENF1802	M 18KOHM, 1/10W	1	
R2461,62	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R2463	ERJ6ENF1502	M 15KOHM, 1/10W	1	
R2464	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R2466	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2467	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R2468	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2469	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2470	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2471	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R2472	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R2473	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R2476,77	ERJ6GEYJ220	M 22 OHM,J,1/10W	2	
R2480	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2481,82	ERJ6GEYJ153	M 15KOHM,J,1/10W	2	
R2483	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2484	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R2494	ERJ12YJ821	M 820 OHM,J, 1/2W	1	
R3703	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R3704	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R3705	ERJ6GEYJ512	M 5.1KOHM,J,1/10W	1	
R3706	ERJ6GEYJ912	M 9.1KOHM,J,1/10W	1	
R3707	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3708	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R3711	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R3715,16	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3720,21	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R3723,24	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R3725-28	ERJ6GEY0R00	M 0 OHM, 1/10W	4	
R3730	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R3733-36	ERJ8GEY0R00	M 0 OHM, 1/8W	4	
R3794-96	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R6401-08	ERJ6GEYJ221	M 220 OHM,J,1/10W	8	
R6409	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6410,11	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R6412	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6413	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6420-23	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R6424	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6425-28	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R6429	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6431	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6433	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6441	ERJ6ENF7502	M 75KOHM, 1/10W	1	
R6442	ERJ6ENF6982	M69.8KOHM, 1/10W	1	
R6443	EVMEASA00B24	CONTROL 20KOHMB 0.3W	1	
R6444	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R6445	ERJ6ENF2551	M2.55KOHM, 1/10W	1	
R6446	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6447	ERG2FJS223D	M 22KOHM, J, 2W	1	
R6448	ERG2FJS472D	M 82KOHM, J, 3W	1	
R6449,50	ERJ12YJ1R0	M 1 OHM, J,1/2W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6452	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6453	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6454	ERDS1FJ221	C 220 OHM, J,1/2W	1	
R6455	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R6456	ERJ6ENF4533	M 453KOHM, 1/10W	1	
R6457,58	ERJ6ENF1002	M 10KOHM, 1/10W	2	
R6459	ERJ14YJ104	M 100KOHM, J,1/4W	1	
R6460	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6463	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6464	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6465	ERX2FJS8R2D	M 8.2 OHM, J, 2W	1	
R6466	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6467	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	1	
R6468	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6469	ERJ6GEYJ163	M 16KOHM,J,1/10W	1	
R6470	ERJ14YJ153	M 15KOHM, 1/2W	1	
R6471	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6472	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6473	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6474	ERDS1FJ221	C 220 OHM, J,1/2W	1	
R6475	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R6476	ERJ6ENF3243	M 324KOHM, 1/10W	1	
R6477	EVMEASA00B53	CONTROL 5KOHMB 0.3W	1	
R6478	ERJ6ENF6981	M6.98KOHM, 1/10W	1	
R6479	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6480	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6482	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6483	ERJ14YJ622	M 62KOHM, J,1/4W	1	
R6484	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6485,86	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6487	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6488	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6489	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R6491	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6492,93	ERJ6ENF2203	M 220KOHM, 1/10W	2	
R6495,96	ERJ12YJ1R0	M 1 OHM, J,1/2W	2	
R6497	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6498,99	ERX1FJS8R2D	M 8.2 OHM, J, 1W	2	
R6500	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	1	
R6501-09	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	9	
R6510	ERX3FJS2R2D	M 2.2 OHM, J, 3W	1	
R6511	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6512	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R6513	ERX3FJS2R2D	M 2.2 OHM, J, 3W	1	
R6514	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6515	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6516	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R6517	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6518	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R6519	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6520	ERJ6GEYJ151	M 150 OHM,J,1/10W	1	
R6521	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6522	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6524	ERJ6ENF2001	M 2KOHM, 1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6525	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6526	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6527	ERJ14YJ102	M 1KOHM, J,1/4W	1	
R6528	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6529	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6530-35	ERJ6GEYJ220	M 22 OHM,J,1/10W	6	
R6538	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6539	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R6540	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6541	ERJ6GEYJ470	M 47 OHM,J,1/10W	1	
R6542-47	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	6	
R6550	ERG1FJS332D	M 3.3KOHM, J, 1W	1	
R6551-53	ERJ6ENF1003	M 100KOHM, 1/10W	3	
R6554	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R6555	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6556	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	1	
R6557	EVMEASA00B14	CONTROL 10KOHMB 0.3W	1	
R6558	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6559	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6560,61	ERJ6GEYJ470	M 47 OHM,J,1/10W	2	
R6562	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6563	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	1	
R6565	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6566	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R6567,68	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	2	
R6571-78	ERJ6GEYJ471	M 470 OHM,J,1/10W	8	
R6580	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6581	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R6582,83	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R6584	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6585	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6586	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6587	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R6588,89	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R6590	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6591	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R6592,93	ERJ6GEYJ224	M 220KOHM,J,1/10W	2	
R6594	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6595,96	ERJ6ENF5231	M5.23KOHM, 1/10W	2	
R6599,00	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6601	ERD25V0T	M OHM, 1/10W	1	
R6603	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6604	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6605-07	ERJ6GEYJ224	M 220KOHM,J,1/10W	3	
R6608,09	ERJ12YJ1R0	M 1 OHM, J,1/2W	2	
R6610	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6611-14	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	4	
R6615	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R6616	ERDS1FJ221	C 220 OHM, J,1/2W	1	
R6617,18	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R6619,20	ERJ6GEYJ240	M 24 OHM,J,1/10W	2	
R6621	ERJ6ENF1543	M 154KOHM, 1/10W	1	
R6623	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6624	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6625	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6626	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6627,28	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6629	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R6630-35	ERJ12Y0R00	M 0 OHM,J, 1/2W	6	
R6636-39	ERJ12YJ1R0	M 1 OHM, J,1/2W	4	
R6641,42	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	2	
R6643,44	ERJ12YJ220	M 22 OHM,J, 1/2W	2	
R6645,46	ERJ6GEYJ151	M 150 OHM,J,1/10W	2	
R6647,48	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	2	
R6649-54	ERJ6GEYJ680	M 68 OHM,J,1/10W	6	
R6655	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6656	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6658	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6659,60	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6661,62	ERJ6GEYJ470	M 47 OHM,J,1/10W	2	
R6663	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6664	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6665,66	ERJ6GEYJ680	M 68 OHM,J,1/10W	2	
R6667,68	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6669	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6670	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6671	ERG3FJS821D	M 820 OHM, J, 3W	1	
R6672	ERJ12YJ101	M 100 OHM,J, 1/2W	1	
R6673	ERG1SJ100P	M 10 OHM, J, 1W	1	
R6675	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6676	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6678,79	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6680,81	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R6682-85	ERJ3GEYJ471	M 470 OHM,J,1/16W	4	
R6686-89	ERJ3GEYJ473	M 47KOHM,J,1/16W	4	
R6690,91	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6692,93	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R6694,95	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6697,98	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R6701	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6702	ERD25V0T	M OHM, 1/10W	1	
R6711-14	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	4	
R6719,20	ERJ6GEYJ240	M 24 OHM,J,1/10W	2	
R6723	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6724	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6725	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6726	ERJ6GEYJ100	M 10 OHM,J,1/10W	1	
R6727,28	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6730-35	ERJ12Y0R00	M 0 OHM,J, 1/2W	6	
R6736-39	ERJ12YJ1R0	M 1 OHM, J,1/2W	4	
R6741,42	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	2	
R6743,44	ERJ12YJ220	M 22 OHM,J, 1/2W	2	
R6747,48	ERJ6GEYJ5R6	M 5.6 OHM,J,1/10W	2	
R6755	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6756	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R6759,60	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6761	ERJ12YJ470	M 47 OHM, J,1/2W	1	
R6762-64	ERJ6GEYJ224	M 220KOHM,J,1/10W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6765	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6766-68	ERJ6GEYJ223	M 22KOHM,J,1/10W	3	
R6769,70	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R6771	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6772	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6773	ERJ6GEYJ272	M 2.7KOHM,J,1/10W	1	
R6774	EVMEASA00B53	CONTROL 5KOHMB 0.3W	1	
R6777,78	ERX3FJSR22D	M 2.2 OHM, J, 3W	2	
R6779,80	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R6781	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6782,83	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R6784	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R6785,86	ERJ6GEYJ470	M 47 OHM,J,1/10W	2	
R6787	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R6788	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6789	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R6801-03	ERJ3GEYJ471	M 470 OHM,J,1/16W	3	
R6804-06	ERJ3GEYJ473	M 47KOHM,J,1/16W	3	
R6807-09	ERJ3GEYJ471	M 470 OHM,J,1/16W	3	
R6810-12	ERJ3GEYJ473	M 47KOHM,J,1/16W	3	
R6818,19	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R6820	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R6821	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6823	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R6824	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R6825	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R6826	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R6827	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R7105	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7111-21	ERJ14YJ220	M 22 OHM, J,1/4W	11	
R7126-28	ERJ3GEYJ470	M 47 OHM,J,1/16W	3	
R7130	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7132	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7136	ERJ14YJ220	M 22 OHM, J,1/4W	1	
R7142-59	ERJ3GEYJ470	M 47 OHM,J,1/16W	18	
R7161	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7162-65	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R7166-69	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7170-73	ERJ3GEYJ121	M 120 OHM,J,1/16W	4	
R7175-77	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R7178	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7187	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7188	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7189	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7190	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R7192	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7205	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7211-18	ERJ14YJ220	M 22 OHM, J,1/4W	8	
R7219	ERJ6GEYJ224	M 220KOHM,J,1/10W	1	
R7221-24	ERJ6GEYJ103	M 10KOHM,J,1/10W	4	
R7226-30	ERJ3GEYJ470	M 47 OHM,J,1/16W	5	
R7232	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R7233-40	ERJ14YJ220	M 22 OHM, J,1/4W	8	
R7241-64	ERJ3GEYJ470	M 47 OHM,J,1/16W	24	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7268,69	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R7278	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R7285-87	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R7289-92	ERJ3GEYJ181	M 180 OHM,J,1/16W	4	
R7293-96	ERJ3GEYJ121	M 120 OHM,J,1/16W	4	
R7297-00	ERJ3GEYJ220	M 22 OHM,J,1/16W	4	
R7301-04	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R7305	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7306	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7309,10	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R7503	ERJ6ENF8060	M 806 OHM, 1/10W	1	
R7504	ERJ6ENF3921	M3.92KOHM, 1/10W	1	
R7505	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7506	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R7507	ERJ6ENF8060	M 806 OHM, 1/10W	1	
R7508	ERJ6ENF1871	M1.87KOHM, 1/10W	1	
R7509	ERJ6ENF8060	M 806 OHM, 1/10W	1	
R7510	ERJ6ENF1871	M1.87KOHM, 1/10W	1	
R7511	ERJ6ENF8060	M 806 OHM, 1/10W	1	
R7512	ERJ6ENF6040	M 604 OHM, 1/10W	1	
R7518	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R7519	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R7520	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7522,23	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R7525-27	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	3	
R7529	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7532,33	ERJ6GEYJ471	M 470 OHM,J,1/10W	2	
R7535	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R7536	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R7537,38	ERJ6GEYJ103	M 10KOHM,J,1/10W	2	
R7539	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R7540	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R7541	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R7542	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R7543	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7544	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R7545,46	ERJ6ENF2201	M 2.2KOHM, 1/10W	2	
R7547	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7548	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R7549	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7559	ERJ6ENF8201	M 8.2KOHM, 1/10W	1	
R7579	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R7583	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R7584	ERJ6GEYJ512	M 5.1KOHM,J,1/10W	1	
R7585	ERJ6ENF8202	M 82KOHM, 1/10W	1	
R7586	ERJ6ENF1371	M1.37KOHM, 1/10W	1	
R7588	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7590	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R7591	ERJ6GEYJ563	M 56KOHM,J,1/10W	1	
R9018-20	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9022-24	ERJ3GEYJ750	M 75 OHM,J,1/16W	3	
R9028	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9029	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R9064	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9104,05	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9108-10	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R9111-13	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9114,15	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R9118	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9122	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9127-29	EXB2HVR000	RESISTOR ARRAY	3	
R9130-32	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R9153,54	EXB2HVR000	RESISTOR ARRAY	2	
R9157	EXB2HVR000	RESISTOR ARRAY	1	
R9167,68	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9171,72	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9176	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9177	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9178,79	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9180	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9182	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9183	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R9187	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9190	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9199	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9200	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R9202	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9203-05	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9206-08	ERJ3GEYJ100	M 10 OHM,J,1/16W	3	
R9216	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9218	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9219	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9220,21	ERJ3GEYJ151	M 150 OHM,J,1/16W	2	
R9224	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R9226	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9228	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9229,30	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9231	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R9232	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9234	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9236	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9240	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9244,45	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9302	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9303	EXB38V103J	RESISTOR ARRAY	1	
R9306	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9308	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9310	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9311	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9315	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9322	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9330	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9333	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9335	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9336	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9337	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9339	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9349	EXB38V470J	RESISTOR ARRAY	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9352	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9353	EXB38V470J	RESISTOR ARRAY	1	
R9355,56	ERJ3GEYJ100	M 10 OHM,J,1/16W	2	
R9357	EXB38V470J	RESISTOR ARRAY	1	
R9362	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9365	EXB38V470J	RESISTOR ARRAY	1	
R9367	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9368	EXB38V470J	RESISTOR ARRAY	1	
R9371	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9373	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9376	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9380	EXB38V151J	RESISTOR ARRAY	1	
R9411	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9413	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9415	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9420	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R9449	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9455	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9459	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9460-62	ERJ3GEYJ100	M 10 OHM,J,1/16W	3	
R9465,66	EXB2HVR000	RESISTOR ARRAY	2	
R9468	EXB2HVR000	RESISTOR ARRAY	1	
R9469	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9475	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9476	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9477,78	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9479	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9480,81	ERJ6ENF1001	M 1KOHM, 1/10W	2	
R9483	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9484,85	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R9486,87	ERJ6ENF1001	M 1KOHM, 1/10W	2	
R9488,89	ERJ3GEYJ100	M 10 OHM,J,1/16W	2	
R9490,91	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9501	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9503	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9513-15	ERJ3GEYJ100	M 10 OHM,J,1/16W	3	
R9525,26	EXB38V470J	RESISTOR ARRAY	2	
R9530	EXB38V470J	RESISTOR ARRAY	1	
R9532	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9535	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9537	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9538	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9540	EXB38V470J	RESISTOR ARRAY	1	
R9541	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R9547	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R9548	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9551	EXB38V470J	RESISTOR ARRAY	1	
R9553	EXB38V680J	RESISTOR ARRAY	1	
R9557	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9558	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9559	EXB38V470J	RESISTOR ARRAY	1	
R9560	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9562	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R9563	ERJ3GEY0R00	M 0 OHM, 1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9569,70	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9577	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9579-81	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9585,86	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9592	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9593	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9594	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9595	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R9596	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9597	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9598,99	EXB38VR000	RESISTOR ARRAY	2	
R9600	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R9601-05	ERJ3GEY0R00	M 0 OHM, 1/16W	5	
R9608,09	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9611-17	ERJ3GEY0R00	M 0 OHM, 1/16W	7	
R9618	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9620,21	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9624	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9625	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R9627,28	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9631-35	ERJ3GEY0R00	M 0 OHM, 1/16W	5	
R9638	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9640,41	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9642	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9643	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9645	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9646	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9647	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9648	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9650-53	EXB38V103J	RESISTOR ARRAY	4	
R9654-57	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R9658	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9659-61	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	3	
R9662	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9663-69	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	7	
R9670-72	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9674	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9679	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9682-84	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9686-88	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9692	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9693	EXB38V103J	RESISTOR ARRAY	1	
R9694-97	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R9699,00	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9701	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9702	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	ERJ3GEYJ680V
R9703-08	ERJ3GEYJ101	M 100 OHM,J,1/16W	6	D0GB101JA002
R9709	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R9710-16	ERJ3GEYJ151	M 150 OHM,J,1/16W	7	
R9717,18	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9719-24	ERJ3GEYJ151	M 150 OHM,J,1/16W	6	
R9725	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9726	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9727	EXB38VR000	RESISTOR ARRAY	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9728	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9730-32	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R9733	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R9734	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9735	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9736	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R9737	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9738,39	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	2	
R9741	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9743-45	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9747	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9748	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9749	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9750	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9751	EXB38V103J	RESISTOR ARRAY	1	
R9752	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9754	EXB38V272J	RESISTOR ARRAY	1	
R9755,56	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	2	
R9757	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R9758	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9759	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R9760	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9761	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9762	EXB38V103J	RESISTOR ARRAY	1	
R9763	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9765	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9766	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9767	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9768	EXB38V470J	RESISTOR ARRAY	1	
R9769	EXB38VR000	RESISTOR ARRAY	1	
R9770	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9771	EXB38VR000	RESISTOR ARRAY	1	
R9773	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9774-76	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R9777	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R9779	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9781	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9782	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R9783,84	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R9785,86	EXB38VR000	RESISTOR ARRAY	2	
R9787	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9788	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9789	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R9790	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R9791	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9794	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R9795	ERJ3GEYJ105	M 1MOHM,J,1/16W	1	
R9798,99	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	2	
R9800	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9803,04	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9805	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9806	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9807,08	EXB38V103J	RESISTOR ARRAY	2	
R9809	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9810,11	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9814	ERJ3GEYJ100	M 10 OHM,J,1/16W	1	
R9816	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9817	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9818,19	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9820	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9823,24	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9825	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9826	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9827	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R9829	ERJ3GEYJ393	M 39KOHM,J,1/16W	1	
R9831,32	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9833	ERJ3GEYJ393	M 39KOHM,J,1/16W	1	
R9834,35	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R9836	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9837	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9838	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9839,40	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9841,42	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R9843,44	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9846,47	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9848	EXB38V103J	RESISTOR ARRAY	1	
R9849,50	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9851	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9852,53	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9855	ERJ3GEYJ393	M 39KOHM,J,1/16W	1	
R9856	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9857	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9858	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9859	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9860	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9861	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9864	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9867	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9868	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9869	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9871	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9872	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9873	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9874,75	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9876	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9878-80	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R9882,83	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9885	EXB38V103J	RESISTOR ARRAY	1	
R9886	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9887	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9889	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9890	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9893-96	ERJ3GEYJ101	M 100 OHM,J,1/16W	4	D0GB101JA002
R9897	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9898	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9900	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9901	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9903-05	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9906	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9907	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9908	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9909	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9910	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9913	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R9914	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9916	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9917	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9918	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9919	ERJ6ENF1002	M 10KOHM, 1/10W	1	
R9920	ERJ3GEYJ105	M 1MOHM,J,1/16W	1	
R9921-23	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R9924	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9925	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9929,30	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R9931	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9932	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9933	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9934	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9935,36	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	2	
R9937	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9939	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9940	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9941	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R9942	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9943	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R9944	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9945,46	ERJ3GEYJ100	M 10 OHM,J,1/16W	2	
R9947	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9948,49	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9951,52	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R9954	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R9956	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9957	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9959,60	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R9961	ERJ6ENF1621	M1.62KOHM, 1/10W	1	
R9962	ERJ6ENF1001	M 1KOHM, 1/10W	1	
R9964	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9965	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9966	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9969	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9970	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9971	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9972	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9973	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9975	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R9984-88	ERJ3GEY0R00	M 0 OHM, 1/16W	5	
R9991	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9993,94	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9996	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R9998	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
RL401	K6B2ADA00007	REALY	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RL402,03	K6B1ADA00009	REALY	2	⚠
RM300	PNA4601M04TV	REMOTE CONTROL RECEIVER	1	
RTL	TNPA2816	CIRCUIT BOARD DG	1	⚠
RTL	TNPA2817	CIRCUIT BOARD H	1	⚠
RTL	TNPA2818	CIRCUIT BOARD TA	1	⚠
RTL	TNPA2929	CIRCUIT BOARD TB		⚠
RTL	TXNPA1QCSU	CIRCUIT BOARD PA	1	⚠
RTL	TXNPF1QCSU	CIRCUIT BOARD PF	1	⚠
RTL	TNPA2872	CIRCUIT BOARD SS2	1	⚠
RTL	TNPA2873	CIRCUIT BOARD SS3	1	⚠
RTL	TNPA2957	CIRCUIT BOARD SU	1	⚠
RTL	TNPA2958	CIRCUIT BOARD SD	1	⚠
RTL	TNPA2869	CIRCUIT BOARD C1	1	⚠
RTL	TNPA2870	CIRCUIT BOARD C2	1	⚠
RTL	TXN/D10QCS	CIRCUIT BOARD D	1	⚠
RTL	TNPA2841	CIRCUIT BOARD P	1	⚠
RTL	TXNSC10QBS	CIRCUIT BOARD SC	1	⚠
RTL	TXNSS10QBS	CIRCUIT BOARD SS	1	⚠
RTL	TXN/G1QCSU	CIRCUIT BOARD G	1	⚠
RTL	TXN/K1QCSU	CIRCUIT BOARD K	1	⚠
S300	K0F122A00172	SWITCREMOTE CONTROLH	1	
S901	J0LT00000009	SWICH	1	⚠
S3702-07	EVQ23405R	SWITCH	6	
SC2	K1KA06A00180	6P CONNECTOR	1	
SC20	K1KA20A00180	20P CONNECTOR	1	
SC23	K1KA03A00213	3P CONNECTOR	1	
SC41-44	K1KB40B00015	40P CONNECTOR	4	
SD1-D3	K1MN80B00004	80P CONNECTOR	3	
SS11	K1KA07A00096	7P CONNECTOR	1	
SS12	K1KA05A00139	5P CONNECTOR	1	
SS23	K1KA11A00073	11P CONNECTOR	1	
SS34	K1KA03A00213	3P CONNECTOR	1	
SS40	K1KB07A00037	7P CONNECTOR	1	
SS41-46	K1MN13B00020	13P CONNECTOR	6	
SS47	K1KB07A00037	7P CONNECTOR	1	
SS48,49	K1KA07A00170	7P CONNECTOR	2	
SU1-U3	K1MN80B00004	80P CONNECTOR	3	
T401	ETS25AD1H6AG	SWITCHING TRANS	1	⚠
T501	ETS49BP116AD	SWITCHING TRANS	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
T502	ETS42BV116AD	SWITCHING TRANS	1	⚠
T6451	G4D1A0000072	SWITCHING TRANS	1	
T6461	ETS13TB139AP	SWITCHING TRANS	1	
T6471	G4D1A0000072	SWITCHING TRANS	1	
TPP1	ERD25V0R00	C 0 OHM, 1/4W	1	
X9302	H0J200500016	CRYSTAL	1	
X9701	H0J245500013	CRYSTAL	1	
X9702	H0J921400003	CRYSTAL	1	
X9703	H0J200500016	CRYSTAL	1	
ZA901	K4ZZ01000121	EARTH LUG	1	
				⚠
C001	EEEHB1A101P	C 100PF, J, 10V	1	
C002	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C003	EEEHB1A101P	C 100PF, J, 10V	1	
C004	EEEHB1H1R0R	C 1.0PF, J, 50V	1	
C005	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C006	EEEHB1C470P	C 47PF, J, 16V	1	
C007	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C008	EEEHB1C470P	C 47PF, J, 16V	1	
C009	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C011	ECJ3YB0J475M	C 0.047UF, K, 25V	1	
C012,13	ECJ1XC1H101J	C 100PF, J, 50V	2	
C014	ECJ1VB1H392K	C 3900PF, K, 50V	1	
C015	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C016	ECJ1XC1H101J	C 100PF, J, 50V	1	
C017	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C018	ECJ1XC1H101J	C 100PF, J, 50V	1	
C019	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C020	ECJ1XC1H220J	C 22PF, J, 50V	1	
C021	EEEHB1H1R0R	C 1.0PF, J, 50V	1	
C022	ECJ1XC1H101J	C 100PF, J, 50V	1	
C023	ECJ1VC1H270J	C 27PF, J, 50V	1	
C024	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C025	EEEHB1C470P	C 47PF, J, 16V	1	
C026	EEEHB1H1R0R	C 1.0PF, J, 50V	1	
C027	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C028	ECJ1XC1H101J	C 100PF, J, 50V	1	
C029	EEEHP0J470P	C 47PF, J,6.3V	1	
C030,31	ECJ1XC1H220J	C 22PF, J, 50V	2	
C032	EEEHP0J470P	C 47PF, J,6.3V	1	
C033	EEEHB1H1R0R	C 1.0PF, J, 50V	1	
C034	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C035	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C037	EEEHB0J101P	C 100PF, J, 6.3V	1	
C038	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C039,40	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C041,42	ECJ1XC1H561J	C 560PF, J, 50V	2	
C043,44	ECJ1XC1H471J	C 470PF, J, 50V	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C047	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C049,50	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C2251	EEEHB1A221P	C 220PF, J, 10V	1	
C2252,53	ECJ2VF1H103Z	C 0.01UF, Z, 50V	2	
C3010,11	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C3040-42	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C3801,02	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C3803	EEEHB0J101P	C 100PF, J, 6.3V	1	
C3804	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3805	EEEHB1C470P	C 47PF, J, 16V	1	
C3806,07	ECJ2VF1H103Z	C 0.01UF, Z, 50V	2	
C3808	EEEHB1C470P	C 47PF, J, 16V	1	
C3809	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C3810	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C3811	TCUY1C225KBM	C 2.2UF, 16V	1	F1K1C225A026
C3812	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3813,14	ECJ1XC1H330J	C 33PF, J, 50V	2	
C3815	ECJ2XB1H563K	C 0.056UF, K, 50V	1	
C3816	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C4501	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4502	EEEHB1A330R	C 33PF, J, 10V	1	
C4503	ECJ1XC1H050C	C 5PF, C, 50V	1	
C4504,05	ECJ1XC1H470J	C 47PF, J, 50V	2	
C4506	ECJ1XC1H050C	C 5PF, C, 50V	1	
C4507,08	ECJ1XC1H220J	C 22PF, J, 50V	2	
C4509,10	ECJ1XC1H121J	C 120PF, J, 50V	2	
C4511	ECJ1XC1H220J	C 22PF, J, 50V	1	
C4512	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4513	ECJ1XC1H101J	C 100PF, J, 50V	1	
C4514	EEEHB1A330R	C 33PF, J, 10V	1	
C4516	EEEHP1C100R	C 10PF, J, 16V	1	
C4518	EEEHP1C100R	C 10PF, J, 16V	1	
C4519	ECJ3XB0J106M	C 10UF, M,6.3V	1	ECJ3YB0J106K
C4521	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4522	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4523	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4524,25	EEEHB0G101R	C 100PF, J, 4V	2	
C4526	ECJ1VB1H471K	C 470PF, K, 50V	1	
C4527,28	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C4529	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4530-32	ECJ1VF1A105Z	C 1UF, Z, 10V	3	
C4533	EEEHB1C470P	C 47PF, J, 16V	1	
C4534	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4535,36	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4537	EEEHB0G101R	C 100PF, J, 4V	1	
C4538	ECJ1VC1H080C	C 8PF, C, 50V	1	
C4539	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4540	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4541	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4542	EEEHB0G101R	C 100PF, J, 4V	1	
C4543-48	ECJ1VF1A105Z	C 1UF, Z, 10V	6	
C4549	EEEHB1A330R	C 33PF, J, 10V	1	
C4550	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4551	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4552	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4553-58	ECJ1VF1A105Z	C 1UF, Z, 10V	6	
C4559	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4560	EEEHB0G101R	C 100PF, J, 4V	1	
C4561	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4562	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4563	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4564	EEEHB0G101R	C 100PF, J, 4V	1	
C4565-79	ECJ1XF1C104Z	C 0.1UF, Z, 16V	15	
C4580	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4581,82	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4583	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4584-86	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4587	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4588	EEEHB0G101R	C 100PF, J, 4V	1	
C4589	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4590	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4591-93	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4594	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4596-00	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4601	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4602	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4603	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4604	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4606	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4607	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4608	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4609	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4611	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4612-14	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4615	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4616	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4617	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4618	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4619	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4620	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4621	ECHU1C471JX5	P 0.47UF, 16V	1	
C4622	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4623-32	ECJ1VF1A105Z	C 1UF, Z, 10V	10	
C4633-35	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4636	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4637,38	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4639-41	ECJ1VF1A105Z	C 1UF, Z, 10V	3	
C4642	EEEHB0G101R	C 100PF, J, 4V	1	
C4643	EEEHP1E100P	C 10PF	1	
C4644	ECJ3XB1C105K	C 1UF, K, 16V	1	
C4645	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4646	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4647	ECJ1XC1H102J	C 1000PF, J, 50V	1	
C4648,49	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4650	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4651,52	ECJ1XC1H150J	C 15PF, J, 50V	2	
C4653	EEEHB0G101R	C 100PF, J, 4V	1	
C4654	ECJ1VF1C105Z	C 1UF, Z, 10V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4655	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4656	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4657	EEFCD0G560R	56UF,	1	
C4658	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4659	EEFCD0G560R	56UF,	1	
C4660	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4661	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4663	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4665-69	ECJ1XB0J105K	C 1UF, K, 16V	5	
C4670	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4671,72	ECJ1XC1H470J	C 47PF, J, 50V	2	
C4673	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4674-77	ECJ1XB1C104K	C 0.1UF, Z, 16V	4	
C4678,79	ECJ1XC1H220J	C 22PF, J, 50V	2	
C4680	ECJ1XC1H050C	C 5PF, C, 50V	1	
C4681,82	EEEHB1A330R	C 33PF, J, 10V	2	
C4683	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4684	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4685,86	ECJ1XC1H121J	C 120PF, J, 50V	2	
C4687	EEEHB1C100R	C 10PF, J, 16V	1	
C4691	ECJ1XC1H101J	C 100PF, J, 50V	1	
C4692	ECJ1VC1H270J	C 27PF, J, 50V	1	
C4693-96	ECJ1XB0J105K	C 1UF, K, 16V	4	
C4697	TCUY0J685MBM	C 6.8UF, 6.3V	1	F1K0J685A003
C4700	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4701	EEEHB1C470P	C 47PF, J, 16V	1	
C4702	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4703,04	EEEHB1A330R	C 33PF, J, 10V	2	
C4705	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4706	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4707	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4708	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4709	EEEHB0G101R	C 100PF, J, 4V	1	
C4710	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4711	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4712	EEEHB0G221P	C 220PF, J, 4V	1	
C4714	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4715	EEEHB0G221P	C 220PF, J, 4V	1	
C4717	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4718-28	ECJ1XF1C104Z	C 0.1UF, Z, 16V	11	
C4729,30	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4731-33	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4734	ECJ1XC1H680J	C 68PF, J, 50V	1	
C4735	ECJ1XC1H330J	C 33PF, J, 50V	1	
C4736	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4737	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4738-42	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4743	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4744-46	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C4747	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4748	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4749	EEEHB0G101R	C 100PF, J, 4V	1	
C4750-55	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	
C4756	ECJ1XB0J105K	C 1UF, K, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4757	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4758,59	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4760,61	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C4762,63	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C4764	ECJ1VB1H471K	C 470PF, K, 50V	1	
C4765-69	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4770	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4771-75	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C4776	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4777-84	ECJ1VF1A105Z	C 1UF, Z, 10V	8	
C4785	EEEHB0G101R	C 100PF, J, 4V	1	
C4786	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4787	EEEHB0G101R	C 100PF, J, 4V	1	
C4788	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4789-92	ECJ1VF1A105Z	C 1UF, Z, 10V	4	
C4793	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4795	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4797	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4799	EEEHB1C470P	C 47PF, J, 16V	1	
C4800,01	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4802	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4803	EEEHB0G101R	C 100PF, J, 4V	1	
C4804	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4805	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4807	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4809	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
C4813	EEEHB1A330R	C 33PF, J, 10V	1	
C4814	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4817	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4818	EEEHB0G101R	C 100PF, J, 4V	1	
C4819	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4820	EEEHB1C470P	C 47PF, J, 16V	1	
C4821	ECJ3YB1C475K	C 0.047UF, K, 16V	1	
C4823	ECJ3YB1C475K	C 0.047UF, K, 16V	1	
C4825	ECJ3YB1C475K	C 0.047UF, K, 16V	1	
C4828	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C4829	EEEHB1C470P	C 47PF, J, 16V	1	
C4830	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C4831	EEEHB1C470P	C 47PF, J, 16V	1	
C4833,34	TCUY0J685MBM	C 6.8UF, 6.3V	2	F1K0J685A003
C5001	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C5002	EEEHB1A330R	C 33PF, J, 10V	1	
C5003	EEEHB1C100R	C 10PF, J, 16V	1	
C5004	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5007	EEEHB1C100R	C 10PF, J, 16V	1	
C5008	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5010	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5011	EEEHB1C100R	C 10PF, J, 16V	1	
C5012	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5013	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5014	EEEHB1C100R	C 10PF, J, 16V	1	
C5015	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5016-19	ECJ1XC1H101J	C 100PF, J, 50V	4	
C5020	EEEHB1C100R	C 10PF, J, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5021	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5022,23	ECJ1XC1H101J	C 100PF, J, 50V	2	
C5024	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C5025	EEEHB1C100R	C 10PF, J, 16V	1	
C5027	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5028	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5029	EEEHB1C100R	C 10PF, J, 16V	1	
C5030	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5031	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5032	EEEHB1C100R	C 10PF, J, 16V	1	
C5033	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5034	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5035	EEEHB1C100R	C 10PF, J, 16V	1	
C5036	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5037	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5038	EEEHB1C100R	C 10PF, J, 16V	1	
C5039	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5040	EEEHB1C470P	C 47PF, J, 16V	1	
C5041	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5042	EEEHB1C100R	C 10PF, J, 16V	1	
C5043	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5044,45	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C5071	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5072	ECJ1XC1H101J	C 100PF, J, 50V	1	
C5073	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C5074-76	ECJ1XB1C104K	C 0.1UF, Z, 16V	3	
C5077	EEEHB1A330R	C 33PF, J, 10V	1	
C5078	EEEHB1C100R	C 10PF, J, 16V	1	
C5079	EEEHB1A330R	C 33PF, J, 10V	1	
C5080	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C5081	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C5082	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5085	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5086	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C5087	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C5101-03	EEEHB1A330R	C 33PF, J, 10V	3	
C5104	EEEHB1C100R	C 10PF, J, 16V	1	
C5105-07	ECJ2VB1C104K	C 0.1UF, K, 16V	3	
C5111,12	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C5118	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5119	EEEHB1C470P	C 47PF, J, 16V	1	
C5126-28	ECJ2VB1C224K	C 0.22UF, K, 16V	3	
C5129-31	ECJ2VB1C104K	C 0.1UF, K, 16V	3	
C5132	EEEHB1C470P	C 47PF, J, 16V	1	
C5133	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C5134	ECJ2XB1H103K	C 0.01UF, K, 50V	1	
C5135	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5136	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C5140	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5142	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5143	EEEHB1C470P	C 47PF, J, 16V	1	
C5149	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C5150	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C5188-90	ECJ1XB1C104K	C 0.1UF, Z, 16V	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5191	EEEHB1C470P	C 47PF, J, 16V	1	
C8001	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C8002	EEEHP1E220P	C 22PF	1	
C8003	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C8004	EEEHP1E220P	C 22PF	1	
C8005	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C8006	EEEHP1E220P	C 22PF	1	
C8008	ECJ1VB1H471K	C 470PF, K, 50V	1	
C8010	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C8011	EEEHB1C101P	C 100PF, J, 16V	1	
C8014	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C8017,18	ECJ3XB0J106M	C 10UF, M,6.3V	2	ECJ3YB0J106K
C8020	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C8022	ECJ3VB1C474K	C 0.47UF, K, 16V	1	
C8023	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C8024	ECJ1VB1H471K	C 470PF, K, 50V	1	
C8025	EEEHB1C470P	C 47PF, J, 16V	1	
C8026	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C8031	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C8032	EEEHB1C470P	C 47PF, J, 16V	1	
C8034	ECJ1XC1H102J	C 1000PF, J, 50V	1	
C8037	ECJ1XC1H101J	C 100PF, J, 50V	1	
C8039	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C8044	TCUY1C225KBM	C 2.2UF, 16V	1	F1K1C225A026
C8045	ECJ1XC1H330J	C 33PF, J, 50V	1	
C8046	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C8047	EEEHP1E220P	C 22PF	1	
C8048	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C8050	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C8051	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C8055	ECJ1XC1H101J	C 100PF, J, 50V	1	
C8201	EEEHB1C470P	C 47PF, J, 16V	1	
C8203	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C8206-09	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C8210	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8211	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C8212	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8213,14	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C8215	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8216	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	
C8217-19	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C8220	EEEHB1C470P	C 47PF, J, 16V	1	
C8221-23	EEEHB1A471P	C 470PF, J, 10V	3	
C8301	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8302-04	ECJ3YB1A475K	C 0.047UF, K, 10V	3	
C8332	EEEHB1C470P	C 47PF, J, 16V	1	
C8334	ECJ1VF1H104Z	C 0.1UF, Z, 50V	1	
C8336	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C8341	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8347	ECJ3XB0J106M	C 10UF, M,6.3V	1	
C8348	ECJ3YB1A475K	C 0.047UF, K, 10V	1	
C8354	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C8366	ECJ1VB1H103K	C 0.01UF, K, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D001	MA3036H	ZENER DIODE	1	MAZ30360H
D002	MA3091M	ZENER DIODE	1	MAZ30910M
D2251,52	MA152K	DIODE	2	MA3X152K
D2254,55	MA152K	DIODE	2	MA3X152K
D3801,02	MA152K	DIODE	2	MA3X152K
D4502,03	MA704	DIODE	2	MA3X704
D5001-04	B0KB00000022	DIODE	4	
D5011	MA3036H	ZENER DIODE	1	MAZ30360H
D5012-14	MA111	DIODE	3	MA2J111
D5101	MA3056M	ZENER DIODE	1	MAZ30560M
D5102-05	MA8110M	ZENER DIODE	4	MAZ81100M
D8001-03	MA3140M	ZENER DIODE	3	MAZ31400M
D8004,05	MA153	DIODE	2	MA3X153
D8302	MA111	DIODE	1	MA2J111
D8304	MA111	DIODE	1	MA2J111
D9028	MA3056M	ZENER DIODE	1	MAZ30560M
IC001	MN102HF75KBF	IC	1	
IC002	C3EBJC000037	IC	1	
IC003	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC004	C0CBCBD00004	IC	1	
IC005	MC14052BF	MOS IC (CMOS GATE ARRLY)	1	C0JBAR000021
IC3003	CXA1315M	LINEAR IC	1	C1AB00000440
IC3004	CXA1875AM	LINEAR IC	1	C0FBBD000017
IC3517	AHC2G66HDCTR	INTEGRATED CIRCUIT	1	C0JBAS000109
IC3699	LSUQ0051	IC	1	C3EBDC000046
IC3801	TVRN013	IC	1	
IC3802	MC14052BF	MOS IC (CMOS GATE ARRLY)	1	C0JBAR000021
IC3803	M51957BFP	LINEAR IC	1	C0EBB0000024
IC4501	C1AB00001702	IC	1	
IC4502	C1AB00001703	IC	1	
IC4503	C0CBCBD00006	IC	1	
IC4504	C3HBKZ000001	IC	1	
IC4505	PQ07VZ012ZP	IC	1	C0DBEZG00004
IC4506	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC4507,08	C0CBCBD00006	IC	2	
IC4509	C0CBCAD00006	IC	1	
IC4510	C0JBAM000095	IC	1	
IC4511	C0CBCBD00006	IC	1	
IC4512	AN15935A-VF	IC	1	
IC4513	PQ07VZ012ZP	IC	1	C0DBEZG00004
IC4514	C0CBCBD00006	IC	1	
IC4515	C0FBAF000040	IC	1	
IC4516	C0CBCAD00006	IC	1	
IC4517	C0CBCBD00006	IC	1	
IC4518	C3ABPJ000048	IC	1	
IC4519,20	TC7SH32F	IC	2	C0JBAE000191
IC4521	C0CBCBD00006	IC	1	
IC4522	C0CBCAD00006	IC	1	
IC4810	PQ12SZ1T	IC	1	C0CBAKG00003
IC5001	C1AB00001864	IC	1	
IC5002	C3EBDC000046	IC	1	
IC5004	C0CBCBD00008	IC	1	
IC5005	C0JBAF000184	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC5006	PST9128NR	IC (LOGIC)	1	C0EBE0000066
IC5007	C0JBAB000573	IC	1	
IC5010	TC74HC4066AF	MOS IC (CMOS S/LOGIC) *	1	C0JBAS000058
IC5011,12	C0CBCBD00008	IC	2	
IC5102	C1AB00001823	IC	1	
IC5103	C0JBAB000573	IC	1	
IC5104	C0JBAZ001994	IC	1	
IC5105	TC7WT74FU	MOS IC (CMOS S/LOGIC)	1	
IC5106	C0JBAZ001264	IC	1	
IC8008	TC4W53FEL	IC	1	C0JBAR000111
IC8009	AHC2G66HDCTR	INTEGRATED CIRCUIT	1	C0JBAS000109
IC8030	MC14066BF	MOS IC (LOGIC) *	1	C0JBAR000025
IC8031	CXA1315M	LINEAR IC	1	C1AB00000440
IC8054	M52346SP	LINEAR IC	1	C1AA00000395
IC8071	MC14052BF	MOS IC (CMOS GATE ARRLY)	1	C0JBAR000021
IC8076	TC74HC14AF	IC	1	C0JBAB000155
IC8200	M52055FP	LINEAR IC	1	C1AB00000734
IC8201	C1AB00001720	IC	1	
JK5001	K1FB124A0014	CONNECTOR	1	
JK5002	K2HA204A0041	JACK	1	
JS001	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4024,25	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS4392-94	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
JS5026	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS5028-30	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
JS5047	J0JCC0000100	CHIP INDUCTOR	1	
JS8093	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS8205	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
L3005	ELJPA100KB	CHIP INDUCTOR	1	
L3801	ELJPA100KB	CHIP INDUCTOR	1	
L4501	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
L4502	TALC168T3R3K	CHIP INDUCTOR COIL	1	G1C3R3K00007
L4503,04	TALC168T5R6K	CHIP INDUCTOR COIL	2	G1C5R6K00007
L4505	TALC168T1R5K	CHIP INDUCTOR COIL	1	G1C1R5K00004
L4506,07	J0JCC0000100	CHIP INDUCTOR	2	
L4508	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4509	G1C100KA0008	INDUCTOR COIL	1	
L4510	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4511-14	J0JCC0000241	CHIP INDUCTOR	4	
L4515	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4516,17	J0JCC0000241	CHIP INDUCTOR	2	
L4520,21	TALC168T5R6K	CHIP INDUCTOR COIL	2	G1C5R6K00007
L4522	TALC168T4R7K	CHIP INDUCTOR COIL	1	G1C4R7K00013
L4524	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4525	G1C100KA0008	INDUCTOR COIL	1	
L4526,27	J0JCC0000241	CHIP INDUCTOR	2	
L4528,29	J0JGC0000021	CHIP INDUCTOR COIL	2	
L4530,31	J0JCC0000241	CHIP INDUCTOR	2	
L4532	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4556	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4558-61	J0JHC0000035	CHIP INDUCTOR	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L4562	J0JGC0000021	CHIP INDUCTOR COIL	1	
L4812	G1C100KA0008	INDUCTOR COIL	1	
L5003,04	J0JCC0000241	CHIP INDUCTOR	2	
L5006-09	J0JCC0000241	CHIP INDUCTOR	4	
L5012	J0JCC0000241	CHIP INDUCTOR	1	
L5015-18	J0JCC0000241	CHIP INDUCTOR	4	
L5101,02	J0JCC0000241	CHIP INDUCTOR	2	
L5104	ELJPA2R2MF	CHIP INDUCTOR	1	
L5105	ELJPA100KB	CHIP INDUCTOR	1	
L8002	ELJPA100KB	CHIP INDUCTOR	1	
L8004	ELJPA100KB	CHIP INDUCTOR	1	
L8200-04	EXCCL3225U1	EMI FILTER	5	
LC4301-09	TLK212T256AL	EMI FILTER	9	J0HAAB000012
LC4324-27	ERJ6GEY0R00	M 0 OHM, 1/10W	4	
LC4329	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4333	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4334	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4335	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4351	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4352	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4353	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4355	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4357-63	TLK212T256AL	EMI FILTER	7	J0HAAB000012
LC4365-72	TLK212T256AL	EMI FILTER	8	J0HAAB000012
LC4374	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4379	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4380	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4381	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4383	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC4384,85	TLK212T256AL	EMI FILTER	2	J0HAAB000012
LC4387,88	TLK212T256AL	EMI FILTER	2	J0HAAB000012
LC4391	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4393	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4395	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4400	TLK212T256AL	EMI FILTER	1	J0HAAB000012
LC4402-07	TLK212T256AL	EMI FILTER	6	J0HAAB000012
LC4411-14	TLK212T256AL	EMI FILTER	4	J0HAAB000012
LC4421-30	TLK212T256AL	EMI FILTER	10	J0HAAB000012
LC4431-36	ELKE103FA	NOISE FILTER	6	
LC4523	J0JCC0000100	CHIP INDUCTOR	1	
LC5001-08	J0HABB000004	LC FILTER	8	
LC8001	ELJPA100KB	CHIP INDUCTOR	1	
LC8003	ELJPA100KB	CHIP INDUCTOR	1	
LC8004-06	J0HABB000004	LC FILTER	3	
LC8200-04	TLK212T256AL	EMI FILTER	5	J0HAAB000012
LC8206	TLK212T256AL	EMI FILTER	1	J0HAAB000012
Q001	2SD1819A0L	TRANSISTOR	1	
Q004,05	2SB1218A0L	TRANSISTOR	2	
Q006-09	2SD1819A0L	TRANSISTOR	4	
Q020	2SD1819A0L	TRANSISTOR	1	
Q023,24	2SD1819A0L	TRANSISTOR	2	
Q027	2SD1819A0L	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q029,30	2SD1819A0L	TRANSISTOR	2	
Q2251,52	2SB1218A0L	TRANSISTOR	2	
Q2253	2SD1819A0L	TRANSISTOR	1	
Q2254,55	2SB1218A0L	TRANSISTOR	2	
Q2258	2SD1819A0L	TRANSISTOR	1	
Q3801	2SB1218A0L	TRANSISTOR	1	
Q3802,03	2SD1819A0L	TRANSISTOR	2	
Q3804	2SB1218A0L	TRANSISTOR	1	
Q4501-03	2SD1819A0L	TRANSISTOR	3	
Q4504-06	2SB1218ARL	TRANSISTOR	3	
Q4507	2SD1819A0L	TRANSISTOR	1	
Q4508	2SB1218ARL	TRANSISTOR	1	
Q4509	2SB1218A0L	TRANSISTOR	1	
Q4510	2SD1819A0L	TRANSISTOR	1	
Q4511-13	2SD1030	TRANSISTOR	3	
Q4522-24	2SD1819A0L	TRANSISTOR	3	
Q4525-27	2SB1218ARL	TRANSISTOR	3	
Q4528	2SD1819A0L	TRANSISTOR	1	
Q4529	2SB1218ARL	TRANSISTOR	1	
Q4530	2SD1030	TRANSISTOR	1	
Q4531	2SB1218ARL	TRANSISTOR	1	
Q4532,33	2SD1030	TRANSISTOR	2	
Q4553-55	2SB1218ARL	TRANSISTOR	3	
Q4556-60	2SD1819A0L	TRANSISTOR	5	
Q5001-06	2SB1218ARL	TRANSISTOR	6	
Q5007	B1MBACA00004	TRANSISTOR	1	
Q5101-03	2SD1819A0L	TRANSISTOR	3	
Q5104,05	2SB1218ARL	TRANSISTOR	2	
Q5106-08	2SD1819A0L	TRANSISTOR	3	
Q8011	2SD1819A0L	TRANSISTOR	1	
Q8012	2SB1218A0L	TRANSISTOR	1	
Q8013	2SD1819A0L	TRANSISTOR	1	
Q8014	2SB1218A0L	TRANSISTOR	1	
Q8015	2SD1819A0L	TRANSISTOR	1	
R001	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R003	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R004	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R005	ERJ3GEYJ202	M 2KOHM,J,1/16W	1	
R006	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R007	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	
R008,09	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	2	
R010	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R012,13	J0JCC0000100	CHIP INDUCTOR	2	
R015	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R016	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R017,18	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R022	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R023	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R024,25	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R026	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R027	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R028	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R030	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R031	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R032	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R034	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R036	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R037	J0JCC0000100	CHIP INDUCTOR	1	
R038	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R039	J0JCC0000100	CHIP INDUCTOR	1	
R040	ERJ3EKF1000	M 100 OHM, 1/16W	1	
R042	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R043	J0JCC0000100	CHIP INDUCTOR	1	
R044	ERJ3EKF1000	M 100 OHM, 1/16W	1	
R045	J0JCC0000100	CHIP INDUCTOR	1	
R046	ERJ3EKF1000	M 100 OHM, 1/16W	1	
R047	J0JCC0000100	CHIP INDUCTOR	1	
R048	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R049	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R050	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R051	ERJ3EKF9100	M 910 OHM, 1/16W	1	
R052	ERJ3EKF5100	M 510 OHM, 1/16W	1	
R054	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R055	ERJ3EKF6800	M 680 OHM, 1/16W	1	
R057	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	1	
R058	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R059	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R060	ERJ3GEYJ122	M 1.2KOHM,J,1/16W	1	
R062,63	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R065	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R066	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R067	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R068	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R069	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R070	J0JCC0000100	CHIP INDUCTOR	1	
R071	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R072	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R073	J0JCC0000100	CHIP INDUCTOR	1	
R074	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R077,78	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R080,81	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R085-87	ERJ3GEYJ102	M 1KOHM,J,1/16W	3	
R092	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R093,94	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R095,96	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R097,98	ERJ3GEYJ241	M 240 OHM,J,1/16W	2	
R099	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R100	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R101	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R102	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R103,04	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R120	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R121	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R122	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R123	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R128-31	ERJ3GEYJ473	M 47KOHM,J,1/16W	4	
R132	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R137,38	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R140	J0JCC0000100	CHIP INDUCTOR	1	
R141	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R148	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R149	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R152	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R158	ERJ3GEYJ122	M 1.2KOHM,J,1/16W	1	
R159-62	ERJ3GEYJ560	M 56 OHM,J,1/16W	4	
R163	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R164	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R165,66	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	2	
R167	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R168	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R462	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R2251,52	ERJ3GEYJ223	M 22KOHM,J,1/16W	2	
R2254	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R2257	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R2258	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R2259	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R2260	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R2261	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R2265	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3026	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3028	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3032,33	J0JCC0000100	CHIP INDUCTOR	2	
R3034-36	ERJ3GEYJ331	M 330 OHM,J,1/16W	3	
R3039-41	ERJ3GEYJ331	M 330 OHM,J,1/16W	3	
R3042,43	J0JCC0000100	CHIP INDUCTOR	2	
R3045	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3047	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3082	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R3140,41	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R3142	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3254	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R3257	ERJ3GEYF152	M 1.5KOHM, 1/16W	1	
R3801	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R3802	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R3803	ERJ3GEYJ273	M 27KOHM,J,1/16W	1	
R3804	ERJ3GEYJ224	M 220KOHM,J,1/16W	1	
R3805	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R3806	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R3809	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3810,11	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3812,13	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R3814	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R3815	J0JCC0000100	CHIP INDUCTOR	1	
R3816-20	ERJ3GEYJ103	M 10KOHM,J,1/16W	5	
R3821	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R3822	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R3823	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R3824,25	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3826	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3827	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3828	J0JCC0000100	CHIP INDUCTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3829,30	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3831,32	J0JCC0000100	CHIP INDUCTOR	2	
R3834,35	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3836	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R3837	ERJ3GEYJ105	M 1MOHM,J,1/16W	1	
R4501-03	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4504	J0JCC0000100	CHIP INDUCTOR	1	
R4505	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4506	J0JCC0000100	CHIP INDUCTOR	1	
R4507	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4508	J0JCC0000100	CHIP INDUCTOR	1	
R4509	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4510	ERJ3EKF2400	M 240 OHM, 1/16W	1	
R4511,12	ERJ3EKF2200	M 220 OHM, 1/16W	2	
R4513,14	ERJ3EKF3300	M 330 OHM, 1/16W	2	
R4515,16	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R4517,18	ERJ3EKF2401	M 2.4KOHM, 1/16W	2	
R4519,20	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R4521	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R4522	ERJ3EKF7500	M 750 OHM, 1/16W	1	
R4523	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4524-26	J0JCC0000100	CHIP INDUCTOR	3	
R4527	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R4529	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4530	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4531,32	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R4534	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4535	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4536	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4537,38	ERJ6GEYJ471	M 470 OHM,J,1/10W	2	
R4539	J0JCC0000100	CHIP INDUCTOR	1	
R4540	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4542	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4543	J0JCC0000100	CHIP INDUCTOR	1	
R4544-46	EXB38VR000	RESISTOR ARRAY	3	
R4547	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R4548,49	J0JCC0000100	CHIP INDUCTOR	2	
R4550	ERJ6ENF1371	M1.37KOHM, 1/10W	1	
R4551	J0JCC0000100	CHIP INDUCTOR	1	
R4552	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R4553	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4554-56	ERJ3EKF33R0	M 33 OHM, 1/16W	3	
R4557,58	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R4559-61	ERJ3EKF33R0	M 33 OHM, 1/16W	3	
R4562-64	ERJ3EKF1500	M 150 OHM, 1/16W	3	
R4565,66	J0JCC0000100	CHIP INDUCTOR	2	
R4567,68	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R4571	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R4573,74	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R4575-77	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R4578,79	J0JCC0000100	CHIP INDUCTOR	2	
R4580	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4581,82	ERJ3GEYJ181	M 180 OHM,J,1/16W	2	
R4583	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4584	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4585	J0JCC0000100	CHIP INDUCTOR	1	
R4586	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	1	
R4587	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4588	J0JCC0000100	CHIP INDUCTOR	1	
R4589	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4590	ERJ3EKF3301	M 3.3KOHM, 1/16W	1	
R4591-94	ERJ3EKF2701	M 2.7KOHM, 1/16W	4	
R4595	J0JCC0000100	CHIP INDUCTOR	1	
R4596	ERJ3EKF1502	M 15KOHM, 1/16W	1	
R4597	ERJ3EKF2000	M 200 OHM, 1/16W	1	
R4598-00	ERJ3EKF75R0	M 0.75HM, 1/16W	3	
R4601	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4602	J0JCC0000100	CHIP INDUCTOR	1	
R4603	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4604	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4605	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4606	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4607	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R4609	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R4610	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4611	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4612,13	ERJ3EKF1001	M 1KOHM, 1/16W	2	
R4614,15	ERJ3EKF1401	M 1.4KOHM, 1/16W	2	
R4616-18	ERJ3GEYJ100	M 10 OHM,J,1/16W	3	
R4620	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R4622,23	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R4627,28	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R4636	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R4637	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R4638-40	ERJ3EKF1002	M 10KOHM, 1/16W	3	
R4642	ERJ3EKF3302	M 33KOHM, 1/16W	1	
R4643,44	ERJ3EKF1002	M 10KOHM, 1/16W	2	
R4645	ERJ3EKF3302	M 33KOHM, 1/16W	1	
R4647,48	ERJ3EKF3302	M 33KOHM, 1/16W	2	
R4650,51	ERJ3EKF3302	M 33KOHM, 1/16W	2	
R4652	J0JCC0000100	CHIP INDUCTOR	1	
R4653-55	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4656	J0JCC0000100	CHIP INDUCTOR	1	
R4657	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4658	J0JCC0000100	CHIP INDUCTOR	1	
R4659	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4660	J0JCC0000100	CHIP INDUCTOR	1	
R4661	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4662,63	ERJ3EKF2200	M 220 OHM, 1/16W	2	
R4664	ERJ3EKF2400	M 240 OHM, 1/16W	1	
R4667,68	ERJ3EKF3300	M 330 OHM, 1/16W	2	
R4669	J0JCC0000100	CHIP INDUCTOR	1	
R4670	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R4672	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R4673	J0JCC0000100	CHIP INDUCTOR	1	
R4674,75	ERJ3EKF2401	M 2.4KOHM, 1/16W	2	
R4677,78	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	2	
R4679	ERJ3EKF2200	M 220 OHM, 1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4680	ERJ3EKF7500	M 750 OHM, 1/16W	1	
R4681	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4682	J0JCC0000100	CHIP INDUCTOR	1	
R4683	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4685	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4686	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4687	J0JCC0000100	CHIP INDUCTOR	1	
R4688	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4689	J0JCC0000100	CHIP INDUCTOR	1	
R4690	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4692	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R4693	ERJ6GEYJ331	M 330 OHM,J,1/10W	1	
R4694	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4695,96	ERJ6ENF1501	M 1.5KOHM, 1/10W	2	
R4697,98	J0JCC0000100	CHIP INDUCTOR	2	
R4699	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R4700	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4701	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R4702	ERJ3EKF1001	M 1KOHM, 1/16W	1	
R4703	ERJ3EKF33R0	M 33 OHM, 1/16W	1	
R4704	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4705	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R4706-10	ERJ3EKF33R0	M 33 OHM, 1/16W	5	
R4711	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R4712-14	ERJ3EKF1500	M 150 OHM, 1/16W	3	
R4715	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4716	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R4717-20	J0JCC0000100	CHIP INDUCTOR	4	
R4722,23	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R4724	ERJ3GEYJ181	M 180 OHM,J,1/16W	1	
R4725	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R4726	J0JCC0000100	CHIP INDUCTOR	1	
R4727-34	EXB38V820J	RESISTOR ARRAY	8	
R4738,39	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4757,58	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4775	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R4776-78	ERJ3GEYJ121	M 120 OHM,J,1/16W	3	
R4779	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4780	ERJ6ENF1801	M 1.8KOHM, 1/10W	1	
R4781	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4782	ERJ6ENF1801	M 1.8KOHM, 1/10W	1	
R4783	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4784	ERJ6ENF1801	M 1.8KOHM, 1/10W	1	
R4785-87	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	3	
R4788-90	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	3	
R4791,92	J0JCC0000100	CHIP INDUCTOR	2	
R4801,02	J0JCC0000100	CHIP INDUCTOR	2	
R4815	ERJ6ENF1501	M 1.5KOHM, 1/10W	1	
R4816	ERJ6ENF1371	M1.37KOHM, 1/10W	1	
R4817	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R4818	J0JCC0000100	CHIP INDUCTOR	1	
R4820-23	ERJ3GEYJ103	M 10KOHM,J,1/16W	4	
R4824,25	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R4826,27	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4828	J0JCC0000100	CHIP INDUCTOR	1	
R4830	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R4831-33	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R4834	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4835	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R5004	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5006	ERJ6ENF1600	M 160 OHM, 1/10W	1	
R5007-09	ERJ6ENF75R0	M 75 OHM, 1/10W	3	
R5010,11	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R5021	ERJ3GEYJ333	M 33KOHM,J,1/16W	1	
R5022	ERJ6ENF4120	M 412 OHM, 1/10W	1	
R5023,24	J0JCC0000100	CHIP INDUCTOR	2	
R5026	J0JCC0000100	CHIP INDUCTOR	1	
R5028-30	J0JCC0000100	CHIP INDUCTOR	3	
R5032	J0JCC0000100	CHIP INDUCTOR	1	
R5053	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R5054	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5056	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R5059	ERJ3GEYJ151	M 150 OHM,J,1/16W	1	
R5061-63	ERJ3GEYJ151	M 150 OHM,J,1/16W	3	
R5064	J0JCC0000100	CHIP INDUCTOR	1	
R5071,72	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R5075,76	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	
R5077	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5078,79	J0JCC0000100	CHIP INDUCTOR	2	
R5089	J0JCC0000100	CHIP INDUCTOR	1	
R5092	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R5101-03	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R5104	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5105	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R5106	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5107	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R5108	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5109	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R5110-12	ERJ6ENF6800	M 680 OHM, 1/10W	3	
R5113-15	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R5116-18	ERJ3GEYJ561	M 560 OHM,J,1/16W	3	
R5119,20	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R5122	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R5123	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R5124	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R5125	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R5126	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R5127	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R5128-30	J0JCC0000100	CHIP INDUCTOR	3	
R5135	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5136	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5137	ERJ6ENF3901	M 3.9KOHM, 1/10W	1	
R5138	ERJ6ENF1601	M 1.6KOHM, 1/10W	1	
R5139	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R5140	ERJ3GEYJ561	M 560 OHM,J,1/16W	1	
R5148-50	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R5151-53	ERJ6GEYJ471	M 470 OHM,J,1/10W	3	
R5154-56	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R5162	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R5164	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R5177	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R5178,79	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	
R5181-85	ERJ6GEYJ333	M 33KOHM,J,1/10W	5	
R5186	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R5190,91	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R5193	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R5194	J0JCC0000100	CHIP INDUCTOR	1	
R5195-97	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	
R5200	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R5202-04	ERJ3GEYJ101	M 100 OHM,J,1/16W	3	D0GB101JA002
R5205	ERJ6ENF6800	M 680 OHM, 1/10W	1	
R5206	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R5207	ERJ6ENF8200	M 820 OHM, 1/10W	1	
R5208	ERJ6ENF2700	M 270 OHM, 1/10W	1	
R5209	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R5210	ERJ6ENF2000	M 200 OHM, 1/10W	1	
R8001-03	ERJ6ENF75R0	M 75 OHM, 1/10W	3	
R8004-06	ERJ6GEYJ220	M 22 OHM,J,1/10W	3	
R8008	J0JCC0000100	CHIP INDUCTOR	1	
R8014,15	J0JCC0000100	CHIP INDUCTOR	2	
R8020	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R8022	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R8024	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R8027,28	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R8030	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R8032	ERJ6ENF2201	M 2.2KOHM, 1/10W	1	
R8034	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R8038	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R8040	ERJ6ENF4701	M 4.7KOHM, 1/10W	1	
R8042	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R8044	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R8046	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R8049	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R8051	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R8055-58	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	4	
R8059-62	ERJ6GEYJ3R3	M 3.3KOHM,J,1/10W	4	
R8065	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R8066,67	J0JCC0000100	CHIP INDUCTOR	2	
R8070,71	J0JCC0000100	CHIP INDUCTOR	2	
R8073	ERJ6GEYJ220	M 22 OHM,J,1/10W	1	
R8074	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R8075	ERJ6GEYJ220	M 22 OHM,J,1/10W	1	
R8077	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R8078,79	J0JCC0000100	CHIP INDUCTOR	2	
R8090	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R8094	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R8098,99	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R8101	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R8102	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R8103	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	1	
R8104	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R8105	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R8106	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R8108-11	ERJ3GEYJ101	M 100 OHM,J,1/16W	4	D0GB101JA002
R8112,13	ERJ3GEYJ330	M 33 OHM,J,1/16W	2	
R8114	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R8115-17	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	3	
R8205,06	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R8208,09	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R8210-12	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	3	
R8213-15	ERJ6GEYJ221	M 220 OHM,J,1/10W	3	
R8216,17	J0JCC0000100	CHIP INDUCTOR	2	
R8218	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R8222	J0JCC0000100	CHIP INDUCTOR	1	
R8223	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R8224	ERJ6ENF8200	M 820 OHM, 1/10W	1	
R8227	J0JCC0000100	CHIP INDUCTOR	1	
R8228-30	ERJ8ENF75R0	M 75 OHM, 1/8W	3	
R8231,32	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R8234	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R8236	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R8239,40	J0JCC0000100	CHIP INDUCTOR	2	
R8250	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R8251	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R8253-55	ERJ6GEYJ105	M 1MOHM,J,1/10W	3	
R8301-03	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R8306-08	ERJ3GEYJ102	M 1KOHM,J,1/16W	3	
R8309	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R8311-14	ERJ3GEYJ223	M 22KOHM,J,1/16W	4	
R8320	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R8371	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R8405	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R8410	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	D0GB101JA002
R8411	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R8505	J0JCC0000100	CHIP INDUCTOR	1	
X001	TSSA104	CRYSTAL	1	H0J400400006
X3801	H0J921400003	CRYSTAL	1	
X4501	H0J202500002	CRYSTAL	1	
C3031	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3033	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3035	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3037	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3043	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3045	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3049	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3051	ECJ2XB1H152K	C 1500PF, K, 50V	1	
C3059	ECA1CM471	E 470UF, 16V	1	
C4201,02	EEEHP1C100R	C 10PF, J, 16V	2	
C4203	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4204	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4205	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4206	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4207	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4208	ECJ1VB1H153K	C 0.15UF, K, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4209	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4210	ECJ1VB1C683K	C 0.068UF, K, 16V	1	
C4211	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4212	ECJ1VB1H332K	C 3300PF, K, 50V	1	
C4213	ECJ1VB1C333K	C 0.033UF, K, 16V	1	
C4214	EEEHB1E4R7R	C 4.7PF, J, 25V	1	
C4215	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4216	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4217	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4218,19	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4220	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C4221	EEEHB1C100R	C 10PF, J, 16V	1	
C4222	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4223	EEEHB1C100R	C 10PF, J, 16V	1	
C4224	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4225	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4226	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4227	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4228	ECJ1VB1H332K	C 3300PF, K, 50V	1	
C4229	ECJ1VB1C333K	C 0.033UF, K, 16V	1	
C4230	EEEHB1E4R7R	C 4.7PF, J, 25V	1	
C4231,32	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C4233-35	ECJ1VF1C105Z	C 1UF, Z, 10V	3	
C4236	ECJ1VB1H153K	C 0.15UF, K, 50V	1	
C4237	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4238	ECJ1VB1C683K	C 0.068UF, K, 16V	1	
C4239	EEEHB1C101P	C 100PF, J, 16V	1	
C4240	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C4241,42	EEEHB1C101P	C 100PF, J, 16V	2	
C4243	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4244	EEEHP1C100R	C 10PF, J, 16V	1	
C4245	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4246	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C4247	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4248	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4249	EEEHP1C100R	C 10PF, J, 16V	1	
C4250	ECJ1VB1A474K	C 0.47UF, Z, 50V	1	
C4251	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4252	EEEHB1H100P	C 10PF, J, 50V	1	
C4253	ECJ1VB1C473K	C 0.047UF, K, 16V	1	
C4254	EEEHB1H3R3R	C 3.3PF, J, 50V	1	
C4255	ECJ1XB0J105K	C 1UF, K, 16V	1	
C4256	EEEHB1C100R	C 10PF, J, 16V	1	
C4257	EEEHB1H4R7R	C 4.7PF, J, 50V	1	
C4258	EEEHB1H3R3R	C 3.3PF, J, 50V	1	
C4260	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4261	ECJ1XB1C223K	C 0.022UF, K, 16V	1	
C4262	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4263	EEEHB1C101P	C 100PF, J, 16V	1	
C4301-11	ECJ1VF1C105Z	C 1UF, Z, 10V	11	
C4312	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C4313	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4315	EEEHB1C470P	C 47PF, J, 16V	1	
C4316	ECJ1VF1C105Z	C 1UF, Z, 10V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4317	EEEHB1C470P	C 47PF, J, 16V	1	
C4318-29	ECJ1VF1C105Z	C 1UF, Z, 10V	12	
C4330,31	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C4332	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C4333	EEEHB0J101P	C 100PF, J, 6.3V	1	
C4334	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4335-40	ECJ1VF1C105Z	C 1UF, Z, 10V	6	
C4341	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4342	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4343	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4344,45	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4347	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4349,50	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4351	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C4352,53	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4354,55	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C4356,57	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C4358	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C4359	EEEHB1C101P	C 100PF, J, 16V	1	
C4360	EEEHB1C100R	C 10PF, J, 16V	1	
C4361	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4362	ECJ1VF1C105Z	C 1UF, Z, 10V	1	
C4363	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C4364,65	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4367,68	ECJ1VF1C105Z	C 1UF, Z, 10V	2	
C4369	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C4370-74	ECJ1VF1C105Z	C 1UF, Z, 10V	5	
D3001-16	MA8110M	ZENER DIODE	16	MAZ81100M
D3018-26	MA8110M	ZENER DIODE	9	MAZ81100M
D3030-48	MA8110M	ZENER DIODE	19	MAZ81100M
IC4201	C1BB00000510	IC	1	
IC4202	TC74HC4066AF	IC	1	C0JBAS000058
IC4203	C1BB00000772	IC	1	
IC4204	C0ABBB000190	IC	1	
IC4205	AN5849SV	IC	1	
IC4301	CXA2079Q	LINEAR IC	1	C1AB00000460
IC4302	AN15852A	IC	1	
JK3001	K1U824A00002	CONNECTOR	1	
JK3002	K2HA306A0024	JACK	1	
JK3003,04	K2HA510A0002	JACK	2	
L4201	G1C100KA0008	INDUCTOR COIL	1	
L4301,02	G1C100KA0008	INDUCTOR COIL	2	
Q4201-06	2SD1819A0L	TRANSISTOR	6	
Q4303	2SB1218A0L	TRANSISTOR	1	
R3001,02	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3003,04	ERJ6ENF75R0	M 75 OHM, 1/10W	2	
R3005	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R3006	ERJ6ENF75R0	M 75 OHM, 1/10W	1	

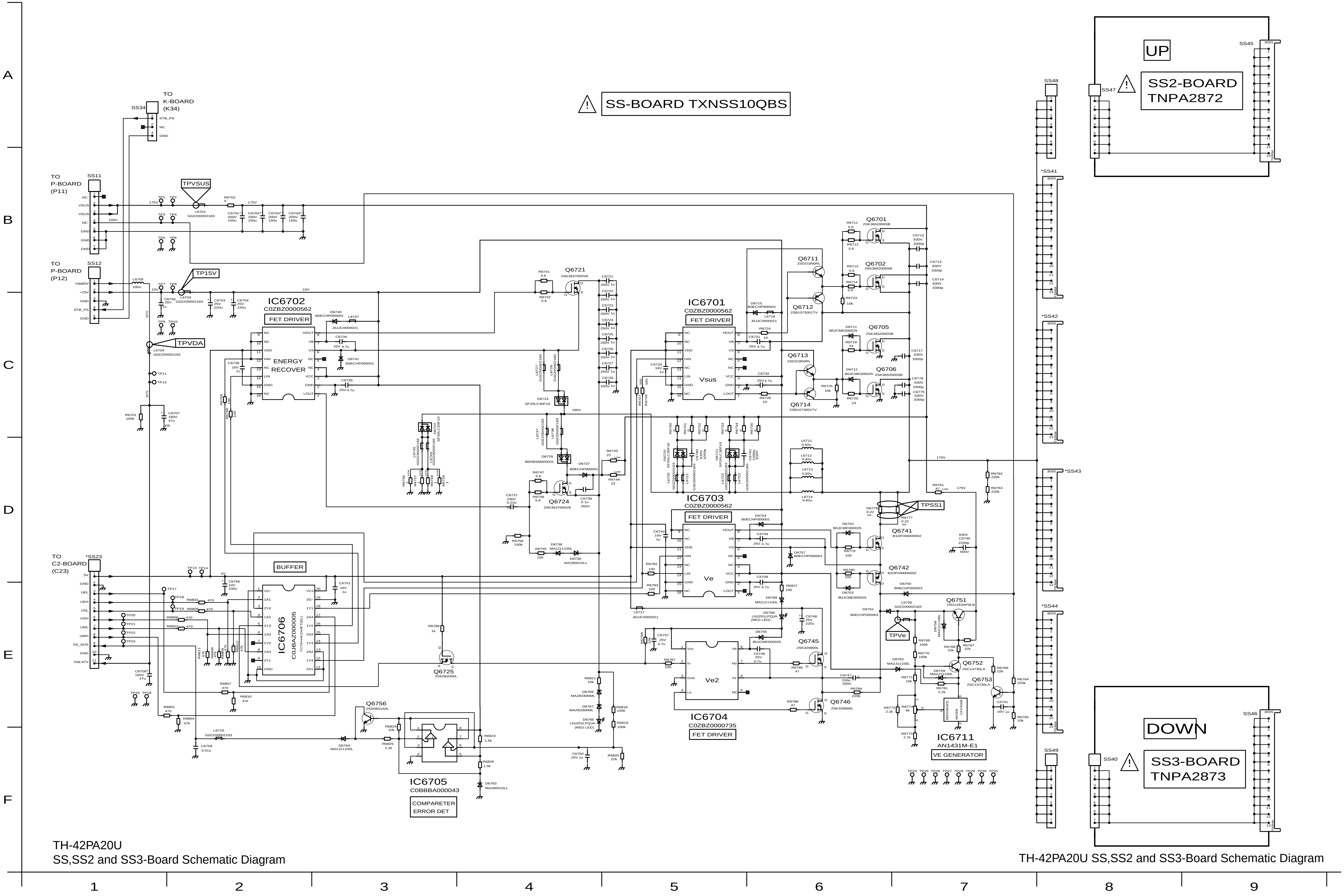
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3007	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R3008-13	ERJ6ENF75R0	M 75 OHM, 1/10W	6	
R3014	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R3015,16	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R3017-19	ERJ6ENF75R0	M 75 OHM, 1/10W	3	
R3020	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R3021,22	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R4201	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4202	ERJ3GEYJ913	M 91KOHM,J,1/16W	1	
R4203	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4204	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4205	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4206	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4207	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R4208	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4209	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4210,11	ERJ3GEYJ913	M 91KOHM,J,1/16W	2	
R4212-14	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R4215	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R4216	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4217,18	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4219	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4220	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R4221	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4222,23	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R4224	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R4225	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4226	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R4227	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4228	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R4229	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4230	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4231-33	ERJ3GEYJ103	M 10KOHM,J,1/16W	3	
R4234	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4235,36	ERJ3GEYJ913	M 91KOHM,J,1/16W	2	
R4237	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4238	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R4239	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4240	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	1	
R4241	ERJ3GEYJ913	M 91KOHM,J,1/16W	1	
R4242	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R4243	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4244	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4245	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R4246	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R4247,48	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R4249	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	
R4250	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4251,52	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
R4253	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4305-15	ERJ3GEYJ221	M 220 OHM,J,1/16W	11	
R4316	ERJ3GEYJ820	M 82 OHM,J,1/16W	1	
R4317	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R4318	ERJ3GEYJ820	M 82 OHM,J,1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4319,20	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R4322-27	ERJ3GEYJ221	M 220 OHM,J,1/16W	6	
R4328,29	ERJ6ENF75R0	M 75 OHM, 1/10W	2	
R4330-32	ERJ3GEYJ820	M 82 OHM,J,1/16W	3	
R4333-36	ERJ3GEYJ221	M 220 OHM,J,1/16W	4	
R4340-46	ERJ3GEYJ102	M 1KOHM,J,1/16W	7	
R4349,50	ERJ3GEYJ102	M 1KOHM,J,1/16W	2	
R4351	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4353	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R4354-62	ERJ3GEYJ102	M 1KOHM,J,1/16W	9	
R4364	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4365	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R4367	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4368	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R4369	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R4370	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R4371,72	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R4373-75	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R4380	ERJ6ENF68R0	M 68 OHM, 1/10W	1	
R4381-83	ERJ6GEYJ681	M 680 OHM,J,1/10W	3	
R4384	ERJ6GEYJ471	M 470 OHM,J,1/10W	1	
R4385-89	ERJ3GEYJ102	M 1KOHM,J,1/16W	5	
R4400-02	ERJ6ENF75R0	M 75 OHM, 1/10W	3	
T3001,02	TSKX027	CHOKE COIL	2	G0BYYYG00005
T3003,04	TSKX026	CHOKE COIL	2	G0BYYYY00016
T3005	G0B600G00001	CHOKE COIL	1	
C201	ECA1CM101	E 100UF, 16V	1	
C202	ECA1HMR22	E 0.22UF, 50V	1	
C203	ECA1VM470	E 47UF, 35V	1	
C204	ECA1HM2R2	E 2.2UF, 50V	1	
C205	ECA1HM4R7	E 4.7UF, 50V	1	
C207	EEUFC1A471	E 470UF, 10V	1	
C208	ECJ1XC1H101J	C 100PF, J, 50V	1	
C210,11	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C212	ECJ1VF1H104Z	C 0.1UF, Z, 50V	1	
C213	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
JS201	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC201,02	ELKE103FA	NOISE FILTER	2	
R201,02	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
TNR201	ENG36619G	TUNER	1	
C251	ECA1CM101	E 100UF, 16V	1	
C252	ECA1HMR22	E 0.22UF, 50V	1	
C253	ECA1VM470	E 47UF, 35V	1	
C254	ECA1HM2R2	E 2.2UF, 50V	1	
C255	ECA1HM4R7	E 4.7UF, 50V	1	
C257	EEUFC1A471	E 470UF, 10V	1	
C258	ECJ1XC1H101J	C 100PF, J, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C259,60	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C261	ECJ1VF1H104Z	C 0.1UF, Z, 50V	1	
C262	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
JS251	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
LC251,52	ELKE103FA	NOISE FILTER	2	
R251,52	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	D0GB101JA002
TNR251	ENG36620G	TUNER	1	

18. Schematic Diagram for printing with A4

19. Cover for printing with A4


SS-BOARD TXNSS10QBS
UP
SS2-BOARD
TNPA2872
DOWN
SS3-BOARD
TNPA2873
TO K-BOARD (K34)
SS34
TO P-BOARD (P11)
SS11
TO P-BOARD (P12)
SS12
TO C2-BOARD (C23)
*SS23
TPVSUS
TP15V
TPVDA
TPSS1
TPVe
IC6702
C0ZBZ0000562
FET DRIVER
ENERGY RECOVER
IC6701
C0ZBZ0000562
FET DRIVER
Vsus
IC6703
C0ZBZ0000562
FET DRIVER
Ve
IC6704
C0ZBZ0000735
FET DRIVER
Ve2
IC6706
C0JBAZ000005
BUFFER
IC6705
C0BBBA000043
COMPARETER ERROR DET
IC6711
AN1431M-E1
VE GENERATOR
Q6701
Q6702
Q6705
Q6706
Q6711
Q6712
Q6713
Q6714
Q6721
Q6724
Q6725
Q6741
Q6742
Q6745
Q6746
Q6751
Q6752
Q6753
Q6756
SS40
SS41
SS42
SS43
SS44
SS45
SS46
SS47
SS48
SS49
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

TH-42PA20U
SS,SS2 and SS3-Board Schematic Diagram

TH-42PA20U SS,SS2 and SS3-Board Schematic Diagram

A

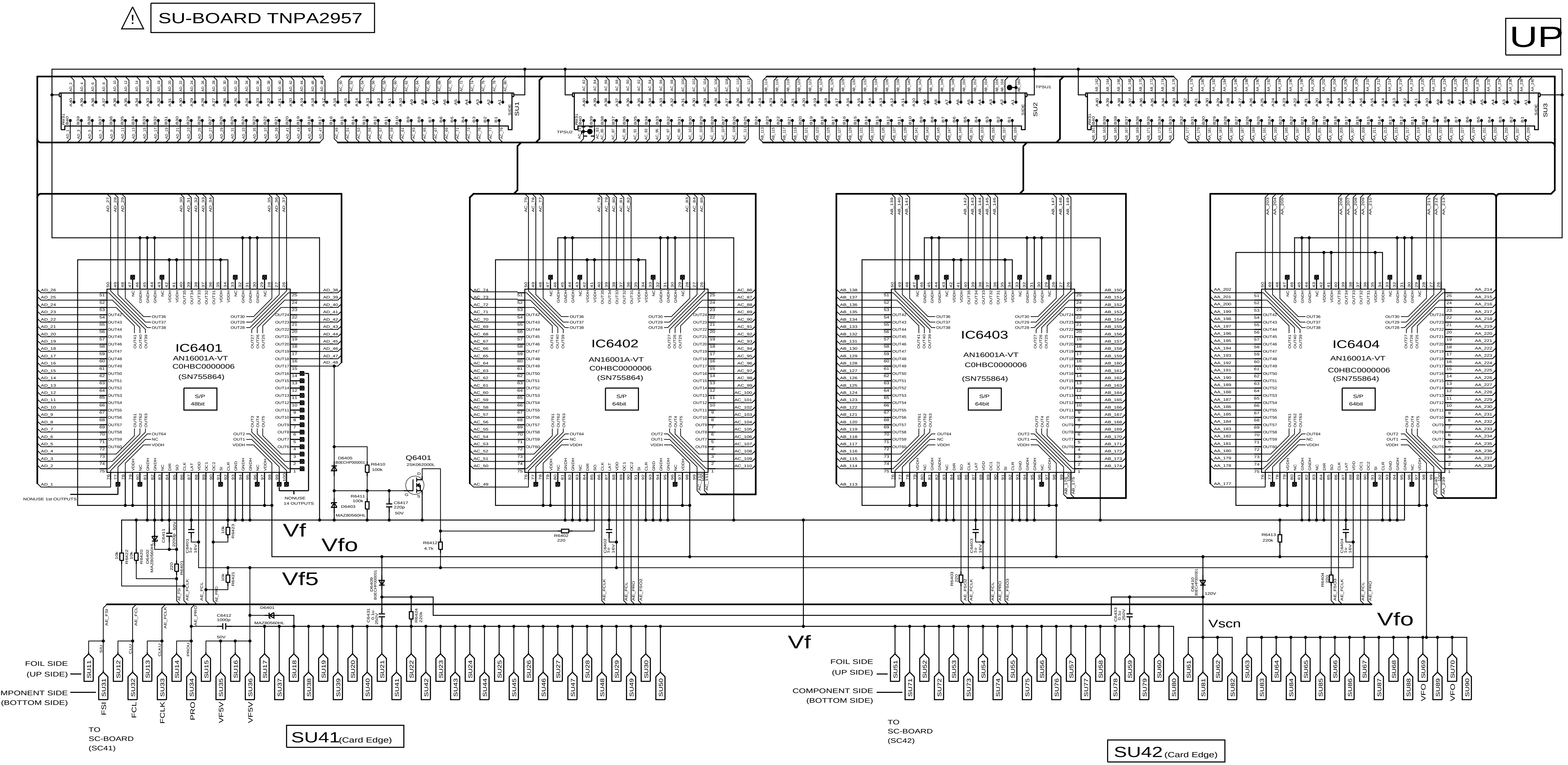
B

C

D

E

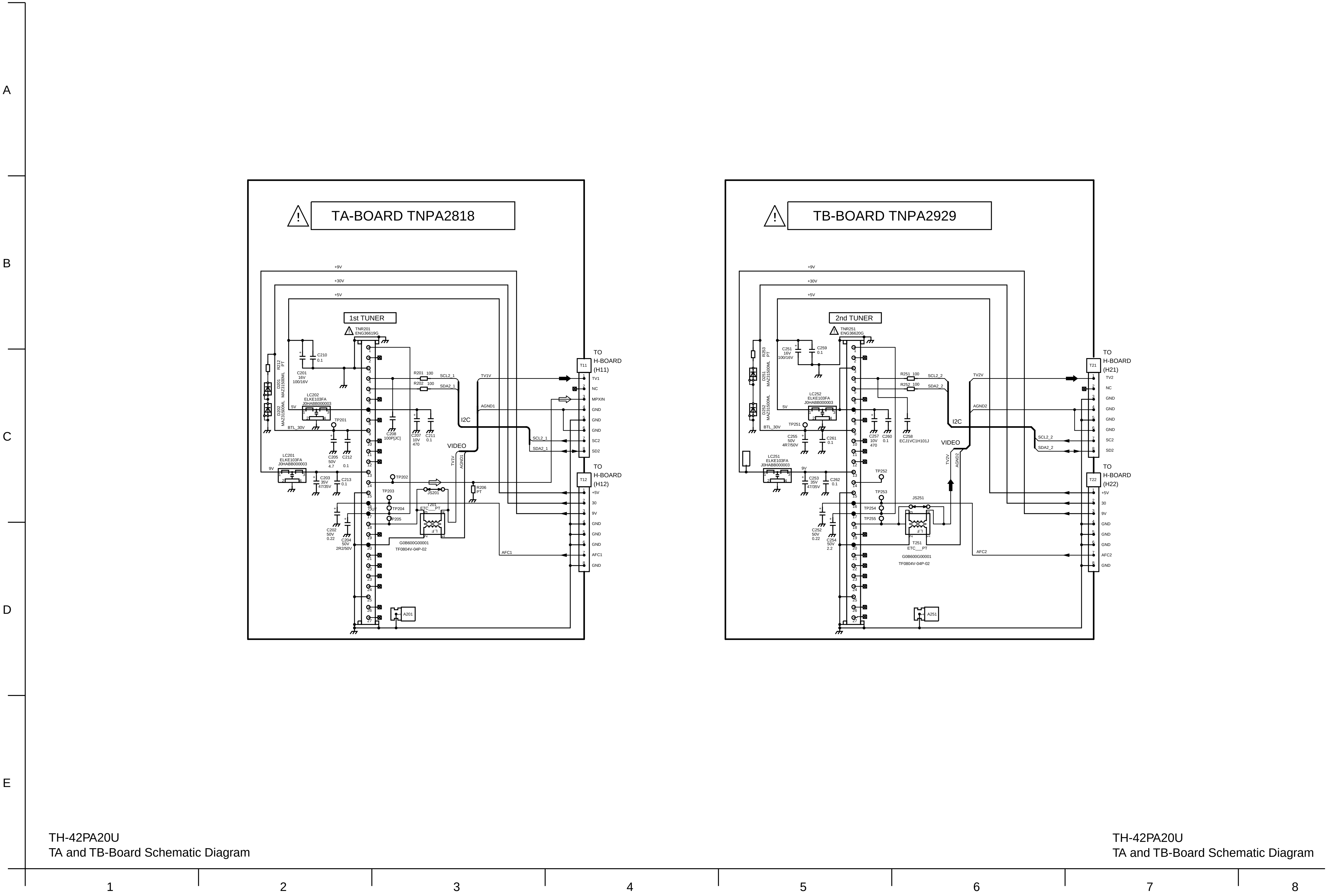
F


SU-BOARD TNPA2957
UP
SU1
SU2
SU3
TPSU1
TPSU2
IC6401
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
48bit
IC6402
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6403
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6404
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
NONUSE 1st OUTPUTS
NONUSE
14 OUTPUTS
Q6401
2SK062000L
D6405
B0ECHP000001
R6410
100k
R6411
100k
D6403
MAZ80560HL
C6417
220p
50V
R6412
4.7k
R6402
220
R6413
220k
D6409
B0ECHP000001
D6410
B0ECHP000001
D6401
MAZ80560HL
C6412
1000p
50V
C6433
R6424
220k
Vf
Vfo
Vf5
Vscn
Vf
Vfo
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
FSI
FCL
FCLK
PRO
VF5V
VF5V
TO
SC-BOARD
(SC41)
SU41(Card Edge)
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
TO
SC-BOARD
(SC42)
SU42(Card Edge)
VFO
VFO

TH-42PA20U
SU-Board Schematic Diagram

TH-42PA20U
SU-Board Schematic Diagram

1 2 3 4 5 6 7 8 9



A
B
C
D
E
1
2
3
4
5
6
7
8
TA-BOARD TNPA2818
1st TUNER
TNR201 ENG36619G
+9V
+30V
+5V
R212 PT
D201 MA231500ML
D202 MA231500ML
C201 16V 100/16V
C210 0.1
LC202 ELKE103FA J0HABB000003
5V
BTL_30V
TP201
C205 50V 4.7
C212 0.1
LC201 ELKE103FA J0HABB000003
9V
C203 35V 47/35V
C213 0.1
C202 50V 0.22
C204 50V 2R2/50V
R201 100
R202 100
SCL2_1
SDA2_1
TV1V
AGND1
C208 100P[JC]
C207 10V 470
C211 0.1
I2C
VIDEO
TP202
TP203
TP204
TP205
JS201
T201 ETC___PT
R206 PT
G0B600G00001
TF0804V-04P-02
AFC1
A201
TO H-BOARD (H11)
T11
TV1
NC
MPXIN
GND
SC2
SD2
SCL2_1
SDA2_1
TO H-BOARD (H12)
T12
+5V
30
9V
AFC1
TB-BOARD TNPA2929
2nd TUNER
TNR251 ENG36620G
R253 PT
D251 MA231500ML
D252 MA231500ML
C251 16V 100/16V
C259 0.1
LC252 ELKE103FA J0HABB000003
TP251
C255 50V 4R7/50V
C261 0.1
LC251 ELKE103FA J0HABB000003
C253 35V 47/35V
C262 0.1
C252 50V 0.22
C254 50V 2.2
R251 100
R252 100
SCL2_2
SDA2_2
TV2V
AGND2
C257 10V 470
C260 0.1
C258 ECJ1VC1H101J
TP252
TP253
TP254
TP255
JS251
T251 ETC___PT
AFC2
A251
TO H-BOARD (H21)
T21
TV2
TO H-BOARD (H22)
T22

TH-42PA20U
TA and TB-Board Schematic Diagram

TH-42PA20U
TA and TB-Board Schematic Diagram

14 Block and Schematic Diagrams

14.1. Schematic Diagram Notes

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

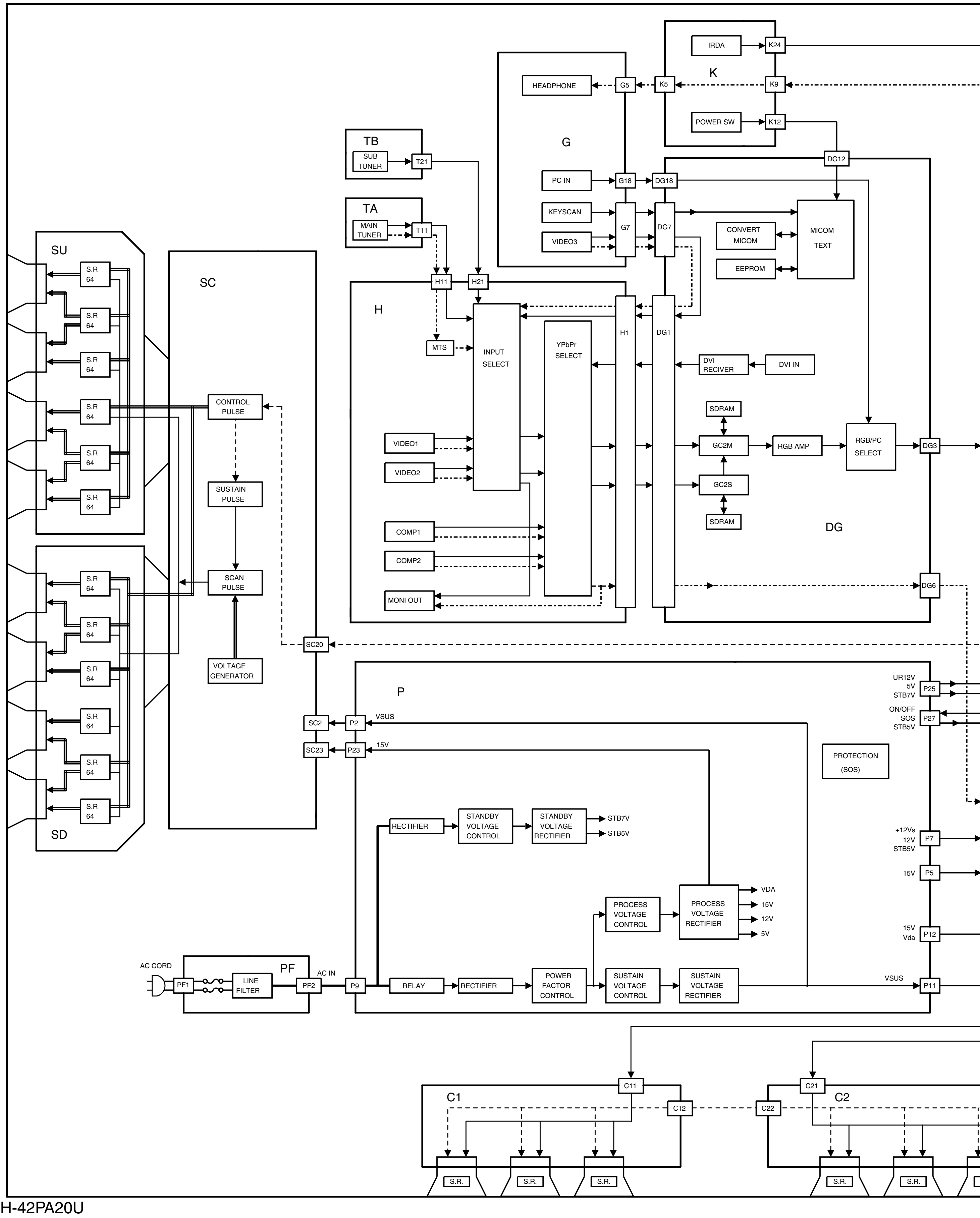
Notes:

1. **Resistor**
   All resistors are cabon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ○ : Nonflammable
   △ : Solid
   ⧄ : Wire Wound
   ⊠ : Metal Oxide
   ◎ : Metal Film
   ⊗ : Fuse**:**
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is µF, unless otherwise noted.
   ⊗ : Temperature Compensation
   Ⓜ : Polyester
   ⓜ : Metalized Polyester
   ⊠ : Polypropylene
   +┤├ : Electrolytic
   NP┤├ : Bipolar
   Ⓣ : Dipped Tantalum
   ⓩ : Z-Type
3. Coil
   Unit of inductance is µF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold)
   ⏚ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source AC120V, 50/60Hz
   Receiving Signal .... Colour Bar signal (RF)
   All customer's controls .... Maximum positions
7. Number in red circle indicates waveform nember.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow
9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

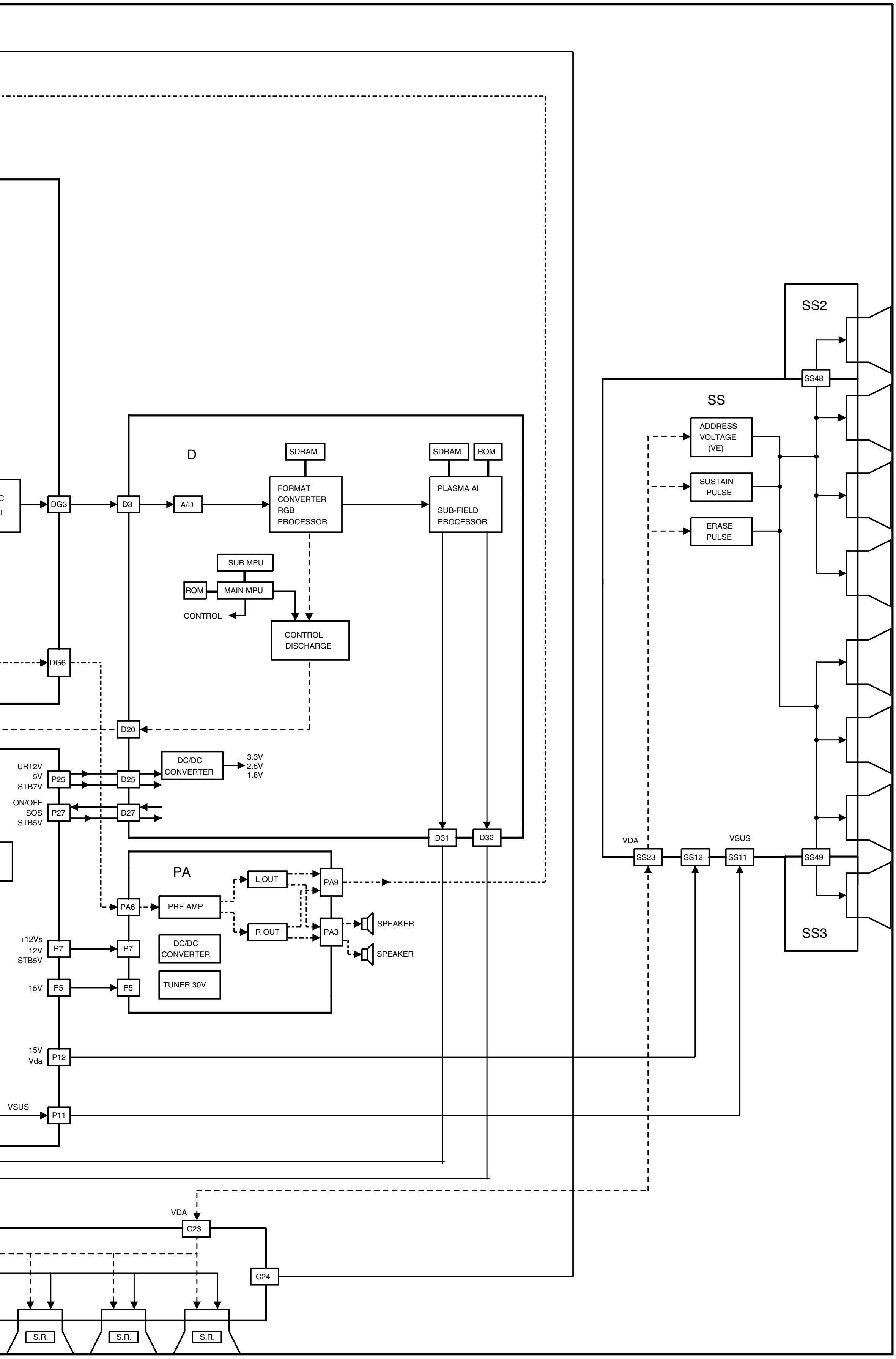
Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
     Connect the earth of instruments to the earth connection of the circuit being measured.
   - d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)

14.2. Main Block Diagram

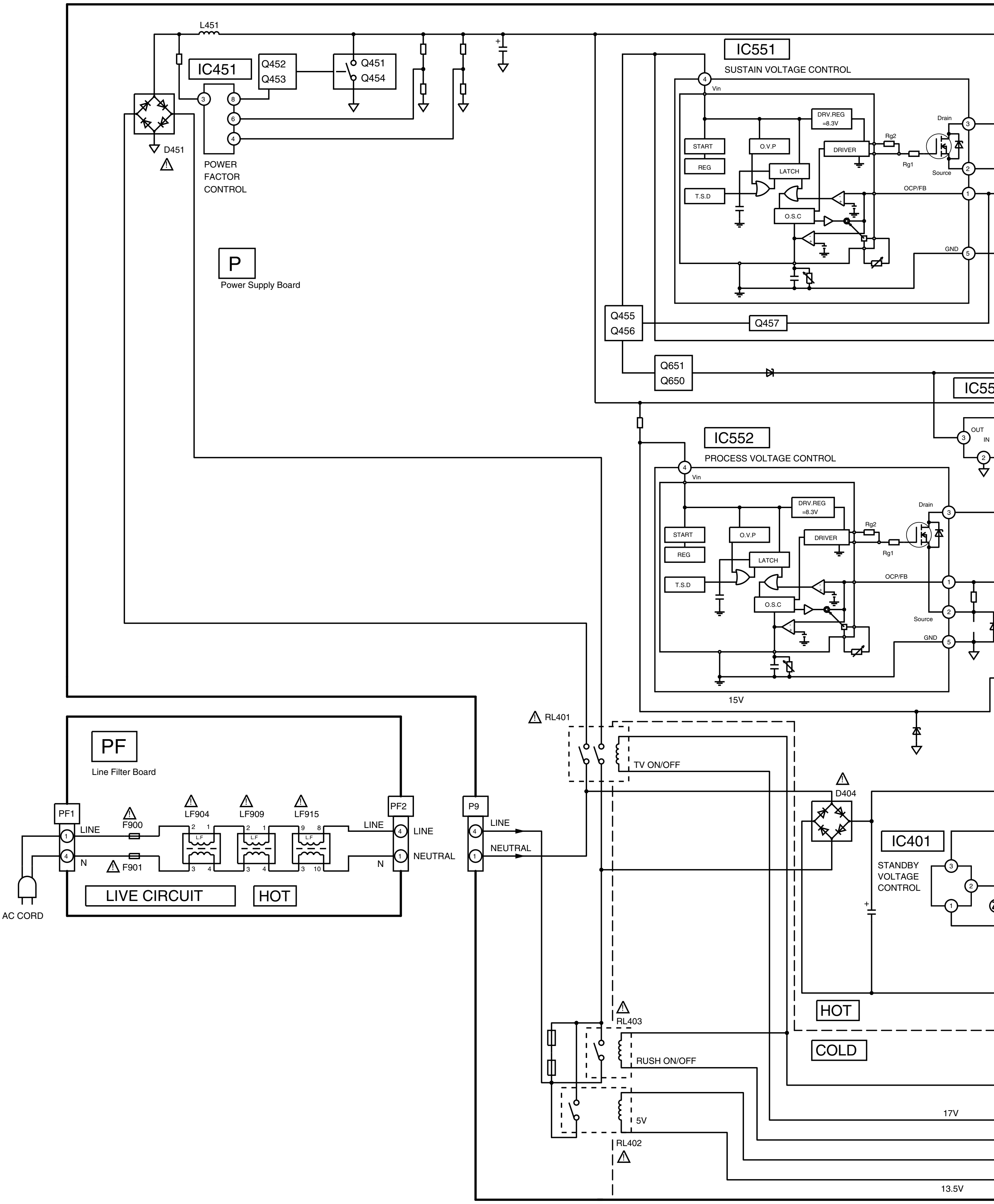

IRDA
K24
K
K5
K9
POWER SW
K12
HEADPHONE
G5
G
PC IN
G18
DG18
KEYSCAN
G7
DG7
VIDEO3
DG12
CONVERT MICOM
MICOM TEXT
EEPROM
TB
SUB TUNER
T21
TA
MAIN TUNER
T11
H11
H21
H
MTS
INPUT SELECT
YPbPr SELECT
H1
DG1
DVI RECIVER
DVI IN
SDRAM
GC2M
RGB AMP
RGB/PC SELECT
DG3
GC2S
SDRAM
DG
VIDEO1
VIDEO2
COMP1
COMP2
MONI OUT
DG6
SU
S.R 64
S.R 64
S.R 64
S.R 64
S.R 64
S.R 64
SC
CONTROL PULSE
SUSTAIN PULSE
SCAN PULSE
VOLTAGE GENERATOR
SD
S.R 64
S.R 64
S.R 64
S.R 64
S.R 64
S.R 64
SC20
SC2
SC23
P2
P23
VSUS
15V
P
UR12V
5V
STB7V
P25
ON/OFF
SOS
STB5V
P27
PROTECTION (SOS)
RECTIFIER
STANDBY VOLTAGE CONTROL
STANDBY VOLTAGE RECTIFIER
STB7V
STB5V
+12Vs
12V
STB5V
P7
15V
P5
PROCESS VOLTAGE CONTROL
PROCESS VOLTAGE RECTIFIER
VDA
15V
12V
5V
15V
Vda
P12
AC CORD
PF1
LINE FILTER
PF
PF2
AC IN
P9
RELAY
RECTIFIER
POWER FACTOR CONTROL
SUSTAIN VOLTAGE CONTROL
SUSTAIN VOLTAGE RECTIFIER
VSUS
P11
C11
C1
C12
C22
C21
C2
S.R.
S.R.
S.R.
S.R.
S.R.

TH-42PA20U
Main Block Diagram

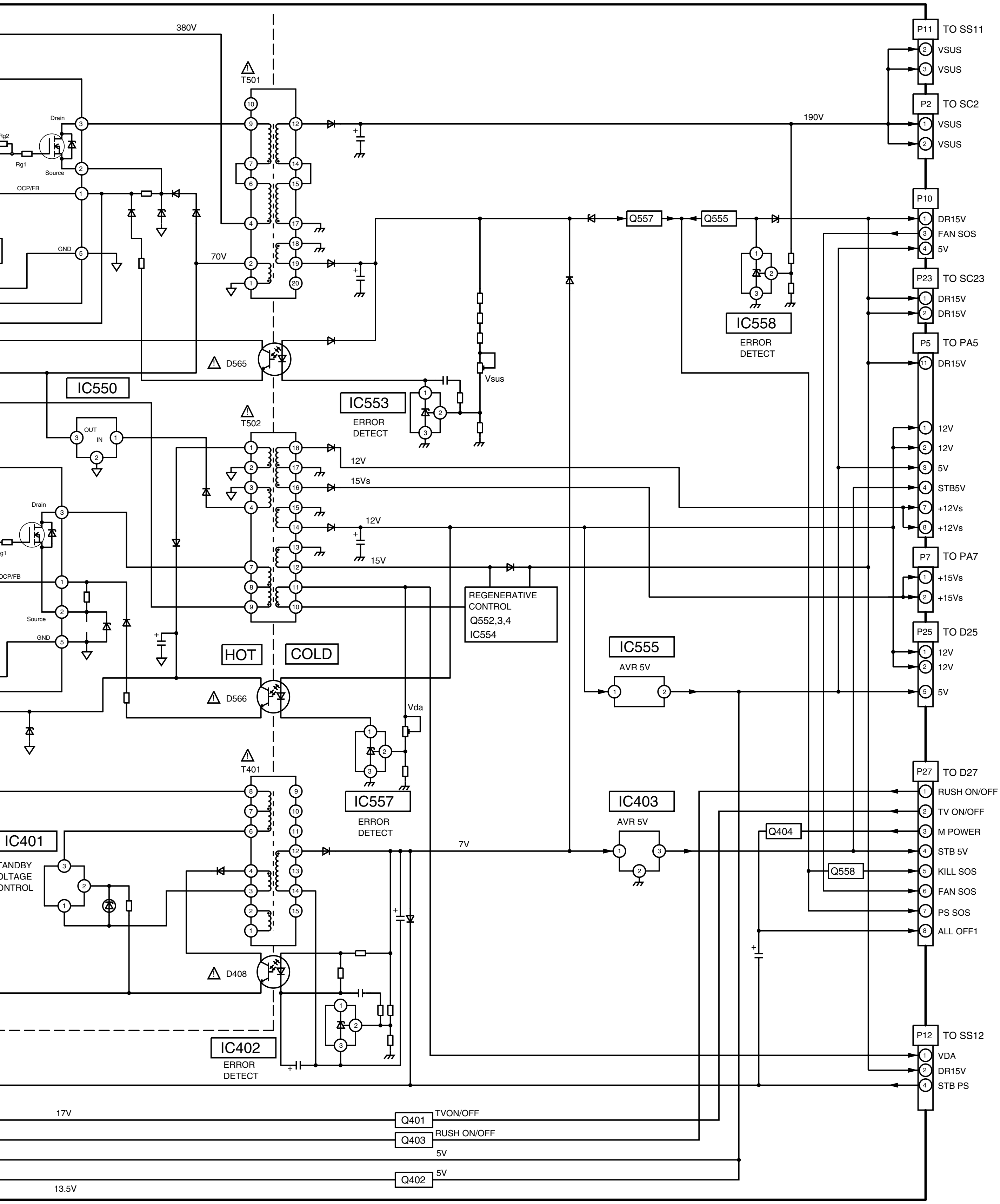

SS2
SS48
SS
ADDRESS
VOLTAGE
(VE)
SUSTAIN
PULSE
ERASE
PULSE
D
SDRAM
SDRAM
ROM
FORMAT
CONVERTER
RGB
PROCESSOR
PLASMA AI
SUB-FIELD
PROCESSOR
DG3
D3
A/D
SUB MPU
ROM
MAIN MPU
CONTROL
CONTROL
DISCHARGE
DG6
D20
UR12V
5V
STB7V
P25
D25
DC/DC
CONVERTER
3.3V
2.5V
1.8V
ON/OFF
SOS
STB5V
P27
D27
D31
D32
VDA
SS23
SS12
VSUS
SS11
SS49
SS3
PA
L OUT
PA9
PA6
PRE AMP
R OUT
PA3
SPEAKER
SPEAKER
+12Vs
12V
STB5V
P7
P7
DC/DC
CONVERTER
15V
P5
P5
TUNER 30V
15V
Vda
P12
VSUS
P11
VDA
C23
C24
S.R.
S.R.
S.R.

TH-42PA20U
Main Block Diagram

14.3. PF and P-Board Block Diagram

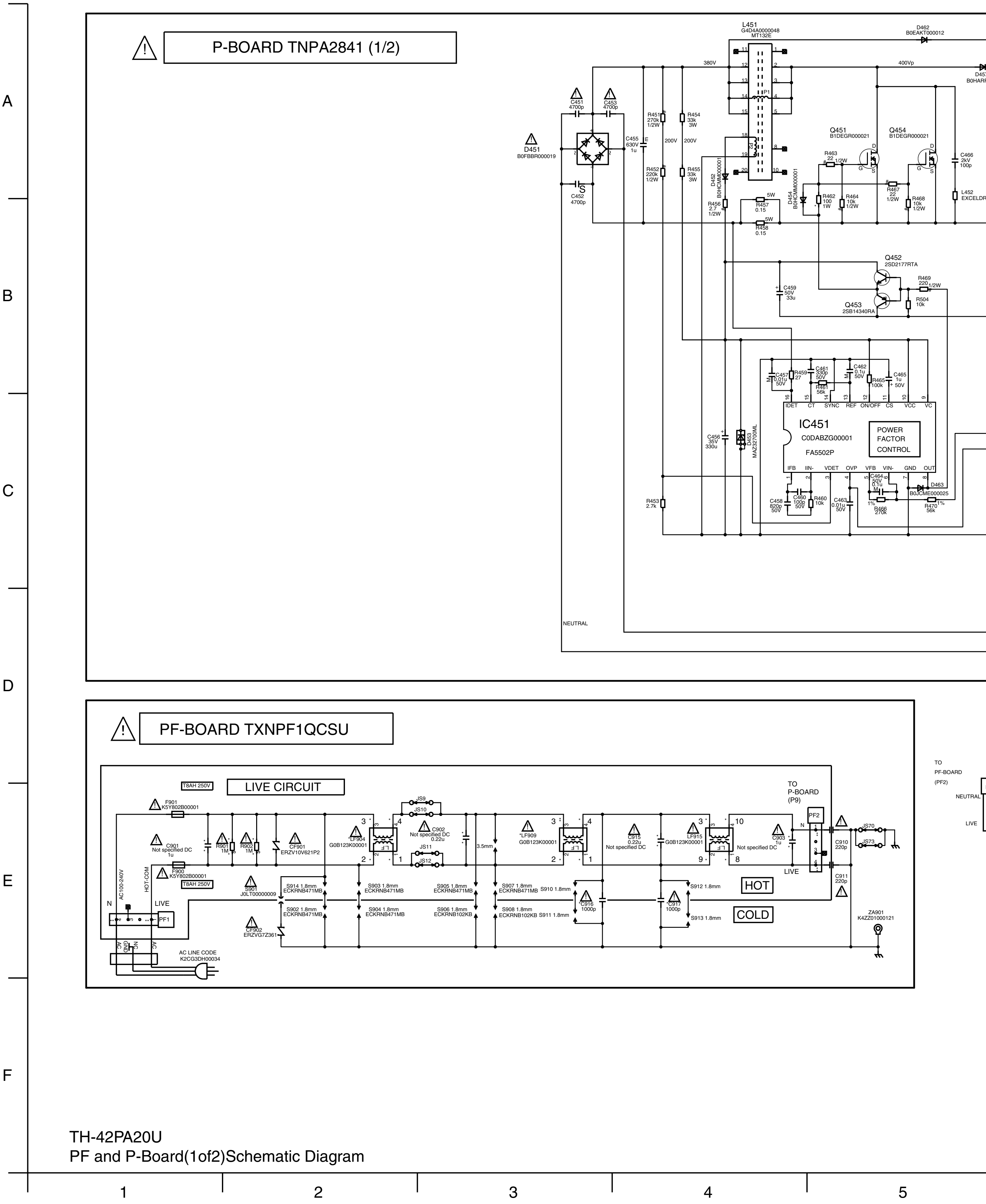

L451
IC451
Q452
Q453
Q451
Q454
D451
POWER
FACTOR
CONTROL
P
Power Supply Board
IC551
SUSTAIN VOLTAGE CONTROL
Vin
DRV.REG
=8.3V
START
REG
T.S.D
O.V.P
LATCH
O.S.C
DRIVER
Rg2
Rg1
Drain
Source
OCP/FB
GND
Q455
Q456
Q457
Q651
Q650
IC55
OUT
IN
IC552
PROCESS VOLTAGE CONTROL
15V
RL401
TV ON/OFF
D404
IC401
STANDBY
VOLTAGE
CONTROL
HOT
COLD
PF
Line Filter Board
PF1
LINE
N
F900
F901
LF904
LF909
LF915
L F
PF2
LINE
NEUTRAL
P9
LIVE CIRCUIT
HOT
AC CORD
RL403
RUSH ON/OFF
5V
RL402
17V
13.5V

TH-42PA20U
PF and P-Board Block Diagram


380V
T501
Drain
Rg2
Rg1
Source
OCP/FB
GND
70V
190V
P11
TO SS11
VSUS
VSUS
P2
TO SC2
VSUS
VSUS
P10
DR15V
FAN SOS
5V
Q557
Q555
P23
TO SC23
DR15V
DR15V
IC558
ERROR
DETECT
P5
TO PA5
DR15V
D565
IC550
IC553
ERROR
DETECT
Vsus
T502
OUT
IN
12V
15Vs
12V
15V
12V
12V
5V
STB5V
+12Vs
+12Vs
P7
TO PA7
+15Vs
+15Vs
REGENERATIVE
CONTROL
Q552,3,4
IC554
HOT
COLD
IC555
AVR 5V
P25
TO D25
12V
12V
5V
D566
Vda
T401
IC557
ERROR
DETECT
IC403
AVR 5V
P27
TO D27
RUSH ON/OFF
TV ON/OFF
M POWER
STB 5V
KILL SOS
FAN SOS
PS SOS
ALL OFF1
IC401
TANDBY
OLTAGE
ONTROL
7V
Q404
Q558
D408
IC402
ERROR
DETECT
P12
TO SS12
VDA
DR15V
STB PS
17V
Q401
TVON/OFF
Q403
RUSH ON/OFF
5V
Q402
5V
13.5V

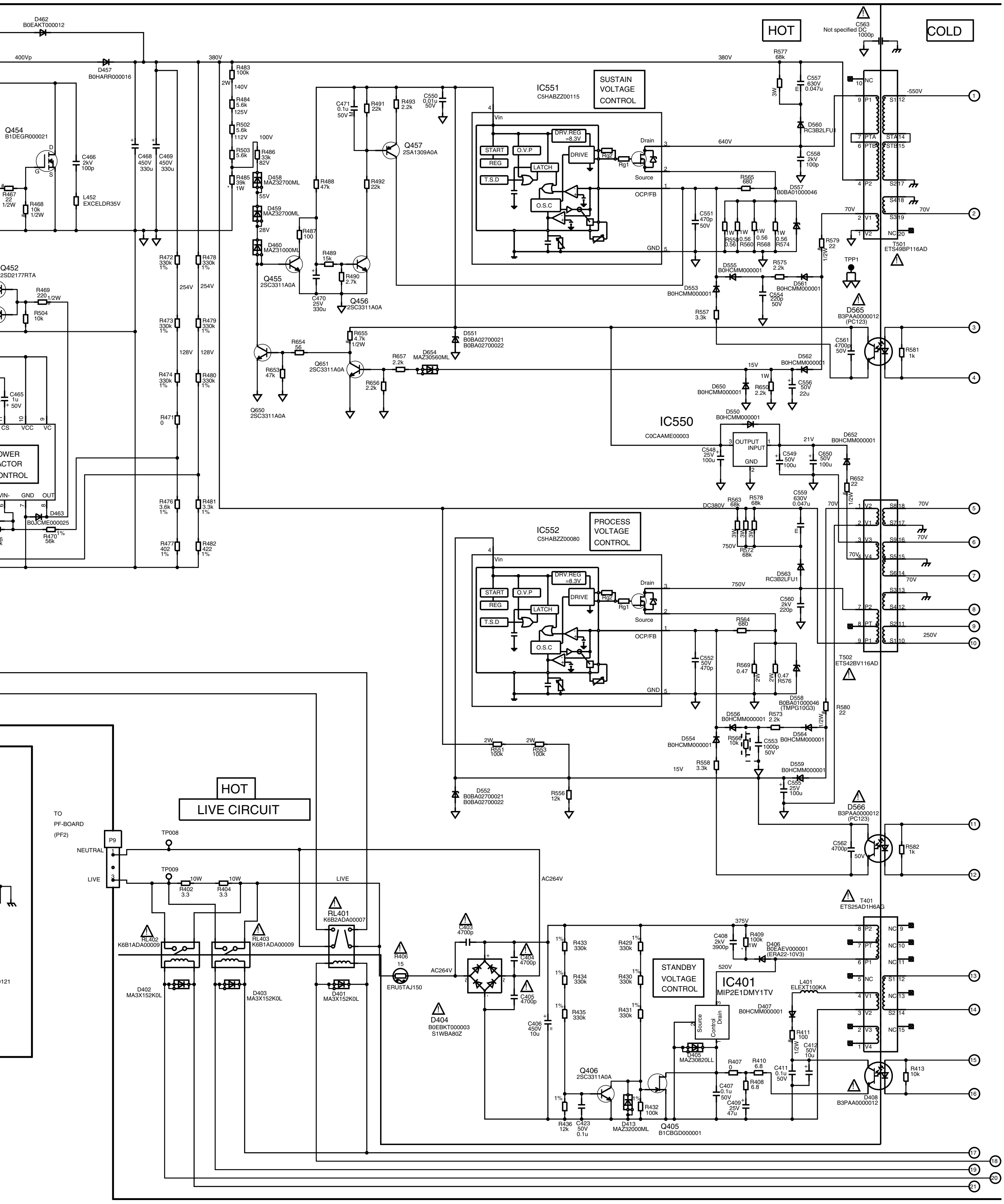
TH-42PA20U
PF and P-Board Block Diagram

14.4. PF and P-Board (1 of 2) Schematic Diagram


A
B
C
D
E
F
1
2
3
4
5
P-BOARD TNPA2841 (1/2)
L451
G4D4A0000048
MT132E
D462
B0EAKT000012
380V
400Vp
D451
B0FBBR000019
C451
4700p
C453
4700p
C452
4700p
C455
630V
1u
R451
270k
1/2W
R452
220k
1/2W
R454
33k
3W
R455
33k
3W
200V
200V
D452
B0HCMM000001
D454
B0HCMM000001
R456
2.7
1/2W
R457
0.15
5W
R458
0.15
5W
Q451
B1DEGR000021
Q454
B1DEGR000021
R463
22
1/2W
R462
100
1W
R464
10k
1/2W
R467
22
1/2W
R468
10k
1/2W
C466
2kV
100p
L452
EXCELDR
Q452
2SD2177RTA
Q453
2SB1434ORA
R469
220
1/2W
R504
10k
C459
50V
33u
C457
0.01u
50V
R459
27
C461
330p
50V
R461
56k
C462
0.1u
50V
R465
100k
C465
1u
50V
C456
35V
330u
D453
MAZ32700ML
IC451
C0DABZG00001
FA5502P
POWER
FACTOR
CONTROL
IDET
CT
SYNC
REF
ON/OFF
CS
VCC
VC
IFB
IIN-
VDET
OVP
VFB
VIN-
GND
OUT
C458
820p
50V
C460
100p
50V
R460
10k
C463
0.01u
50V
C464
50V
0.1u
R466
270k
D463
B0JCME000025
R470
56k
R453
2.7k
NEUTRAL
PF-BOARD TXNPF1QCSU
T8AH 250V
LIVE CIRCUIT
F901
K5Y802B00001
F900
K5Y802B00001
C901
Not specified DC
1u
R901
1M
R902
1M
CF901
ERZV10V621P2
LF904
G0B123K00001
JS9
JS10
JS11
JS12
C902
Not specified DC
0.22u
3.5mm
LF909
G0B123K00001
C915
0.22u
Not specified DC
LF915
G0B123K00001
C903
1u
Not specified DC
TO
P-BOARD
(P9)
PF2
TO
PF-BOARD
(PF2)
NEUTRAL
LIVE
JS70
JS73
C910
220p
C911
220p
S901
J0LT00000009
S914 1.8mm
ECKRNB471MB
S902 1.8mm
ECKRNB471MB
S903 1.8mm
ECKRNB471MB
S904 1.8mm
ECKRNB471MB
S905 1.8mm
ECKRNB471MB
S906 1.8mm
ECKRNB102KB
S907 1.8mm
ECKRNB471MB
S908 1.8mm
ECKRNB102KB
S910 1.8mm
S911 1.8mm
C916
1000p
C917
1000p
S912 1.8mm
S913 1.8mm
HOT
COLD
ZA901
K4ZZ01000121
CF902
ERZVG7Z361
AC100-240V
HOT-COM
N
LIVE
PF1
AC
GND
NC
AC
AC LINE CODE
K2CG3DH00034

TH-42PA20U

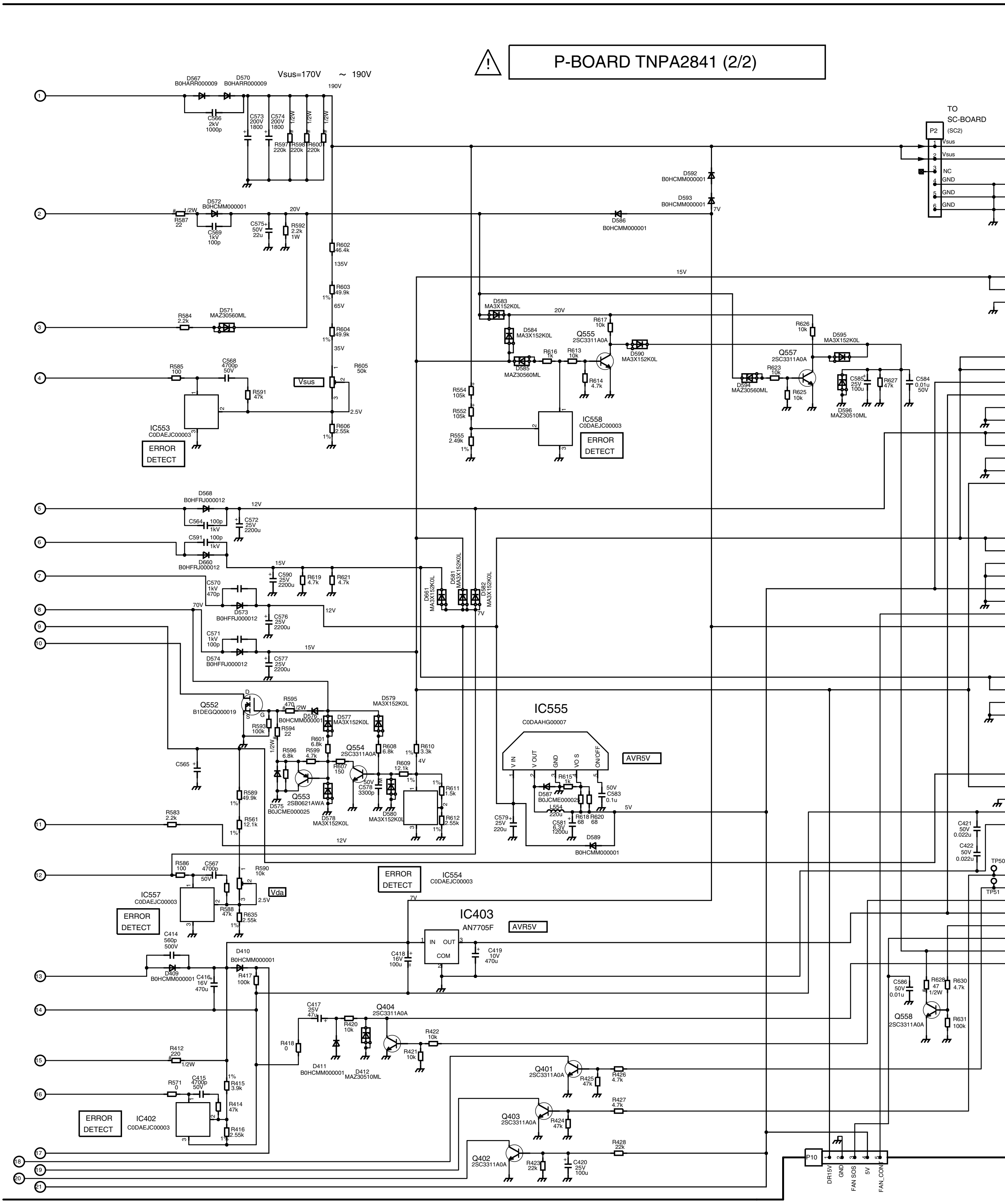
PF and P-Board(1of2)Schematic Diagram


HOT
COLD
LIVE CIRCUIT
SUSTAIN VOLTAGE CONTROL
IC551
C5HABZZ00115
PROCESS VOLTAGE CONTROL
IC552
C5HABZZ00080
IC550
C0CAAME00003
STANDBY VOLTAGE CONTROL
IC401
MIP2E1DMY1TV
Q454
B1DEGR000021
Q452
2SD2177RTA
Q457
2SA1309A0A
Q455
2SC3311A0A
Q456
2SC3311A0A
Q651
2SC3311A0A
Q650
2SC3311A0A
Q406
2SC3311A0A
Q405
B1CBGD000001
D462
B0EAKT000012
D457
B0HARR000016
T501
ETS49BP116AD
T502
ETS42BV116AD
T401
ETS25AD1H6AG
D565
B3PAA0000012
(PC123)
D566
B3PAA0000012
(PC123)
D408
B3PAA0000012
RL401
K6B2ADA00007
RL402
K6B1ADA00009
RL403
K6B1ADA00009
D404
B0EBKT000003
S1WBA80Z
R406
15
ERU5TAJ150
L401
ELEXT100KA
L452
EXCELDR35V
C563
Not specified
DC
1000p
TO
PF-BOARD
(PF2)
P9
NEUTRAL
LIVE
TP008
TP009
TPP1
400Vp
380V
640V
750V
-550V
70V
250V
AC264V
DC380V
375V
520V
START
O.V.P
REG
LATCH
T.S.D
O.S.C
DRV.REG =8.3V
DRIVE
Vin
Drain
Source
OCP/FB
GND
OUTPUT
INPUT
POWER FACTOR CONTROL
Control
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

TH-42PA20U
PF and P-Board(1of2)Schematic Diagram

5 6 7 8 9

14.5. PF and P-Board (2 of 2) Schematic Diagram


P-BOARD TNPA2841 (2/2)
Vsus=170V ~ 190V
190V
D567 B0HARR000009
D570 B0HARR000009
C566 2kV 1000p
C573 200V 1800
C574 200V 1800
R597 220k
R598 220k
R600 220k
1/2W
TO SC-BOARD
P2 (SC2)
Vsus
Vsus
NC
GND
GND
GND
D592 B0HCMM000001
D593 B0HCMM000001
7V
D586 B0HCMM000001
R587 22
1/2W
D572 B0HCMM000001
C569 1kV 100p
20V
C575 50V 22u
R592 2.2k 1W
R602 46.4k
135V
R603 49.9k
65V
R604 49.9k
35V
R605 50k
Vsus
2.5V
R606 2.55k
1%
15V
R584 2.2k
D571 MAZ30560ML
R585 100
C568 4700p 50V
R591 47k
IC553 C0DAEJC00003
ERROR DETECT
D583 MA3X152K0L
20V
D584 MA3X152K0L
D585 MAZ30560ML
R616 1k
R613 10k
R617 10k
Q555 2SC3311A0A
D590 MA3X152K0L
R614 4.7k
R554 105k
R552 105k
R555 2.49k
IC558 C0DAEJC00003
ERROR DETECT
R626 10k
D595 MA3X152K0L
Q557 2SC3311A0A
R623 10k
D594 MAZ30560ML
R625 10k
C585 25V 100u
R627 47k
C584 0.01u 50V
D596 MAZ30510ML
D568 B0HFRJ000012
12V
C564 100p 1kV
C572 25V 2200u
C591 100p 1kV
D660 B0HFRJ000012
15V
C590 25V 2200u
R619 4.7k
R621 4.7k
C570 1kV 470p
D573 B0HFRJ000012
C576 25V 2200u
12V
70V
C571 1kV 100p
D574 B0HFRJ000012
C577 25V 2200u
15V
D661 MA3X152K0L
D581 MA3X152K0L
D582 MA3X152K0L
7V
Q552 B1DEGQ000019
R595 470 1/2W
D576 B0HCMM000001
D577 MA3X152K0L
D579 MA3X152K0L
R593 100k
R594 22
R601 6.8k
R596 6.8k
R599 4.7k
Q554 2SC3311A0A
R608 6.8k
R610 3.3k
4V
R607 150
R609 12.1k
C578 50V 3300p
R611 1.5k
R612 2.55k
Q553 2SB0621AWA
D575 B0JCME000025
D578 MA3X152K0L
D580 MA3X152K0L
C565
R589 49.9k
R583 2.2k
R561 12.1k
12V
IC555 C0DAAHG00007
V IN
V OUT
GND
VO S
ON/OFF
AVR5V
R615 1k
D587 B0JCME000025
L554 220u
C581 6.3V 1200u
R618 68
R620 68
C583 50V 0.1u
5V
C579 25V 220u
D589 B0HCMM000001
R586 100
C567 4700p 50V
R590 10k
Vda
2.5V
IC557 C0DAEJC00003
R588 47k
R635 2.55k
ERROR DETECT
ERROR DETECT
IC554 C0DAEJC00003
7V
IC403 AN7705F
AVR5V
IN OUT COM
C418 16V 100u
C419 10V 470u
C414 560p 500V
D410 B0HCMM000001
D409 B0HCMM000001
C416 16V 470u
R417 100k
C417 25V 47u
R420 10k
Q404 2SC3311A0A
R418 0
D411 B0HCMM000001
D412 MAZ30510ML
R422 10k
R421 10k
R412 220 1/2W
R571 0
C415 4700p 50V
R415 3.9k
R414 47k
R416 2.55k
ERROR DETECT
IC402 C0DAEJC00003
Q401 2SC3311A0A
R425 47k
R426 4.7k
Q403 2SC3311A0A
R424 47k
R427 4.7k
Q402 2SC3311A0A
R423 22k
C420 25V 100u
R428 22k
P10
DR15V
GND
FAN SOS
5V
FAN_CONT
C421 50V 0.022u
C422 50V 0.022u
TP50
TP51
C586 50V 0.01u
R628 47 1/2W
R630 4.7k
Q558 2SC3311A0A
R631 100k
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
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19
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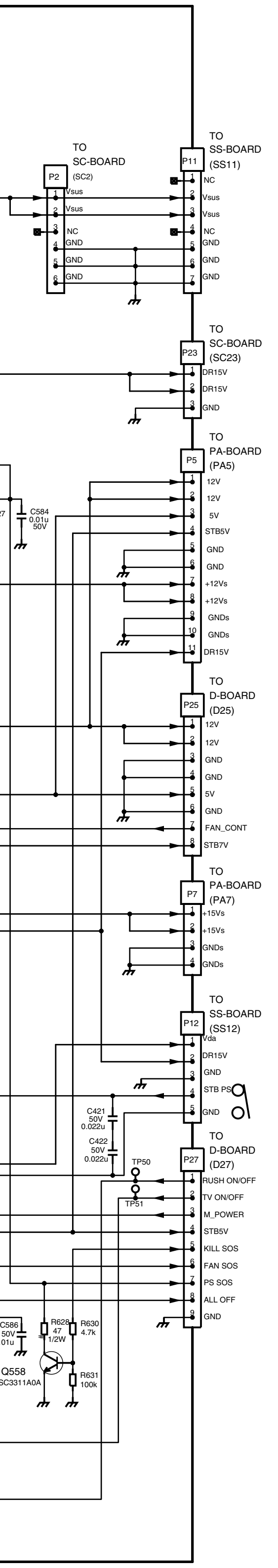
21

TH-42PA20U
PF and P-Board(2of2)Schematic Diagram

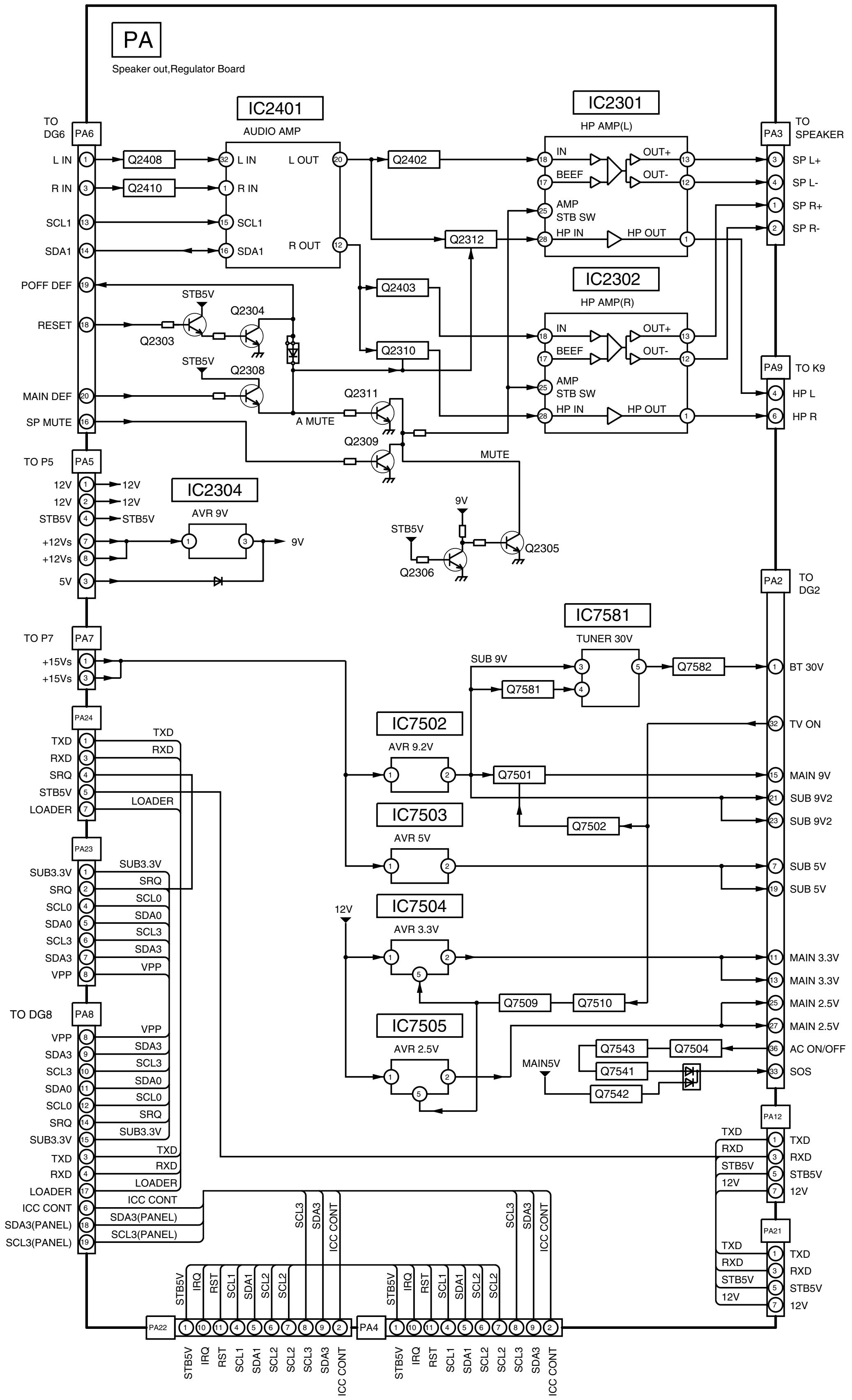
10 11 12 13 14


TO
SC-BOARD
P2
(SC2)
Vsus
Vsus
NC
GND
GND
GND
TO
SS-BOARD
P11
(SS11)
NC
Vsus
Vsus
NC
GND
GND
GND
TO
SC-BOARD
P23
(SC23)
DR15V
DR15V
GND
TO
PA-BOARD
P5
(PA5)
12V
12V
5V
STB5V
GND
GND
+12Vs
+12Vs
GNDs
GNDs
DR15V
C584
0.01u
50V
TO
D-BOARD
P25
(D25)
12V
12V
GND
GND
5V
GND
FAN_CONT
STB7V
TO
PA-BOARD
P7
(PA7)
+15Vs
+15Vs
GNDs
GNDs
TO
SS-BOARD
P12
(SS12)
Vda
DR15V
GND
STB PS
GND
C421
50V
0.022u
C422
50V
0.022u
TO
D-BOARD
P27
(D27)
TP50
TP51
RUSH ON/OFF
TV ON/OFF
M_POWER
STB5V
KILL SOS
FAN SOS
PS SOS
ALL OFF
GND
C586
50V
01u
R628
47
1/2W
R630
4.7k
R631
100k
Q558
SC3311A0A

TH-42PA20U
PF and P-Board(2of2)Schematic Diagram

14 15 16 17 18

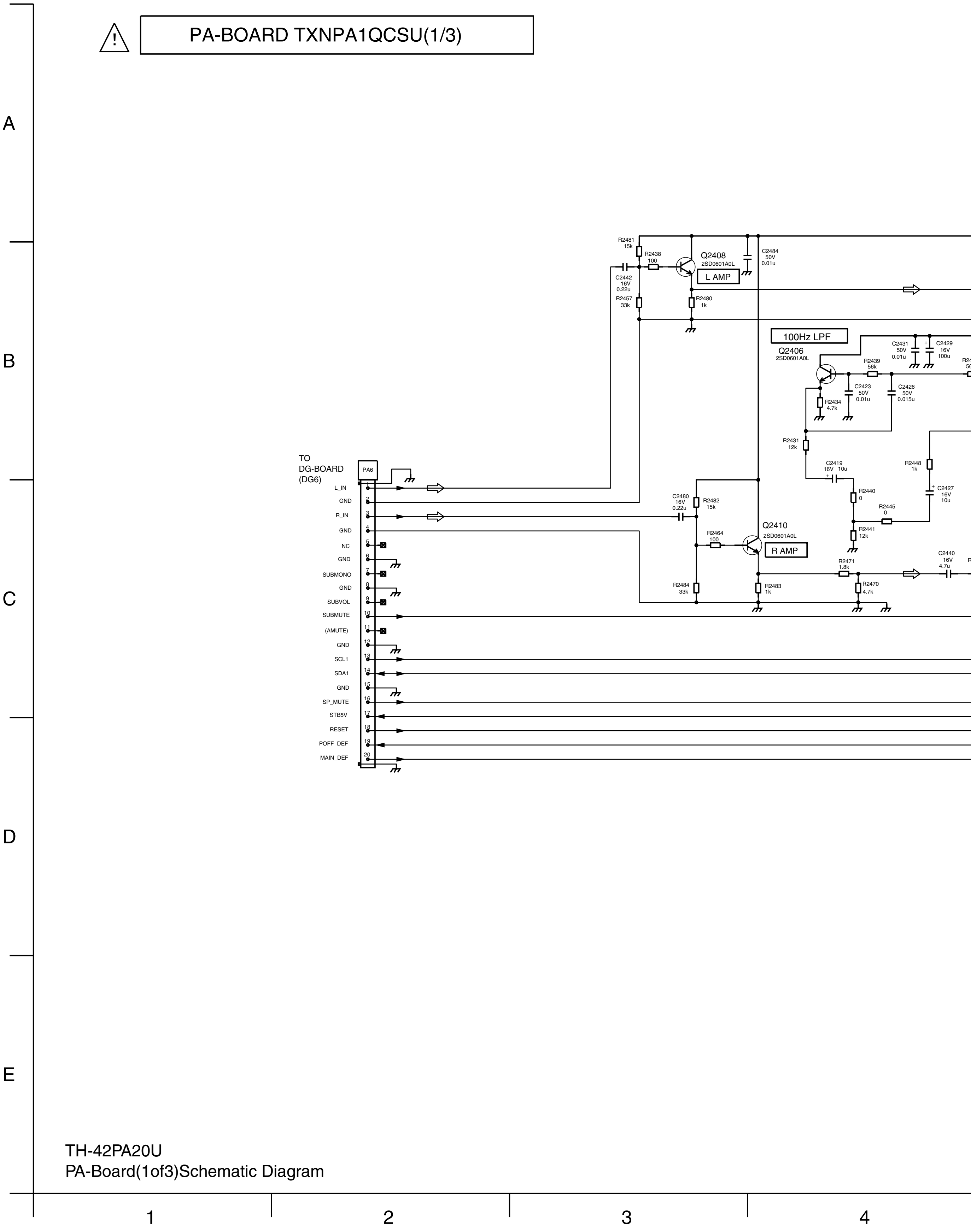
14.6. PA-Board Block Diagram


PA
Speaker out,Regulator Board
IC2401
AUDIO AMP
IC2301
HP AMP(L)
TO DG6
PA6
TO SPEAKER
PA3
L IN
R IN
SCL1
SDA1
POFF DEF
RESET
MAIN DEF
SP MUTE
Q2408
Q2410
L IN
R IN
SCL1
SDA1
L OUT
R OUT
Q2402
Q2312
Q2403
Q2310
IN
BEEF
AMP STB SW
HP IN
OUT+
OUT-
HP OUT
SP L+
SP L-
SP R+
SP R-
IC2302
HP AMP(R)
STB5V
Q2304
Q2303
Q2308
Q2311
A MUTE
Q2309
MUTE
PA9
TO K9
HP L
HP R
TO P5
PA5
12V
STB5V
+12Vs
5V
IC2304
AVR 9V
9V
STB5V
Q2306
Q2305
TO DG2
PA2
TO P7
PA7
+15Vs
IC7581
TUNER 30V
SUB 9V
Q7581
Q7582
BT 30V
TV ON
PA24
TXD
RXD
SRQ
STB5V
LOADER
IC7502
AVR 9.2V
Q7501
Q7502
MAIN 9V
SUB 9V2
PA23
SUB3.3V
SRQ
SCL0
SDA0
SCL3
SDA3
VPP
IC7503
AVR 5V
SUB 5V
12V
IC7504
AVR 3.3V
MAIN 3.3V
Q7509
Q7510
MAIN 2.5V
TO DG8
PA8
IC7505
AVR 2.5V
MAIN5V
Q7543
Q7504
Q7541
Q7542
AC ON/OFF
SOS
PA12
TXD
RXD
STB5V
12V
LOADER
ICC CONT
SDA3(PANEL)
SCL3(PANEL)
PA21
PA22
PA4
IRQ
RST
SCL1
SDA1
SCL2

TH-42PA20U
PA-Board Block Diagram

TH-42PA20U
PA-Board Block Diagram

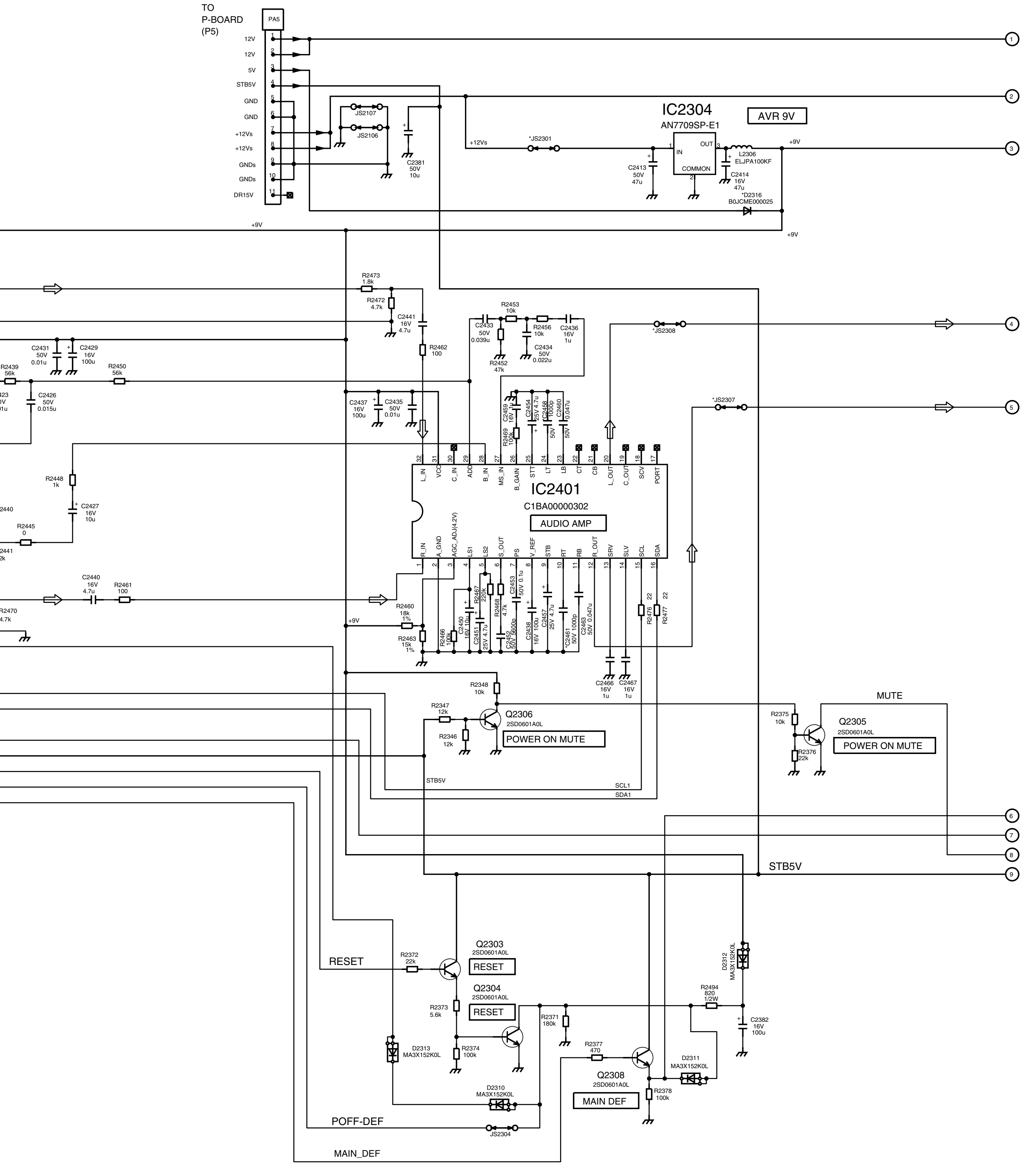
14.7. PA-Board (1 of 3) Schematic Diagram



PA-BOARD TXNPA1QCSU(1/3)

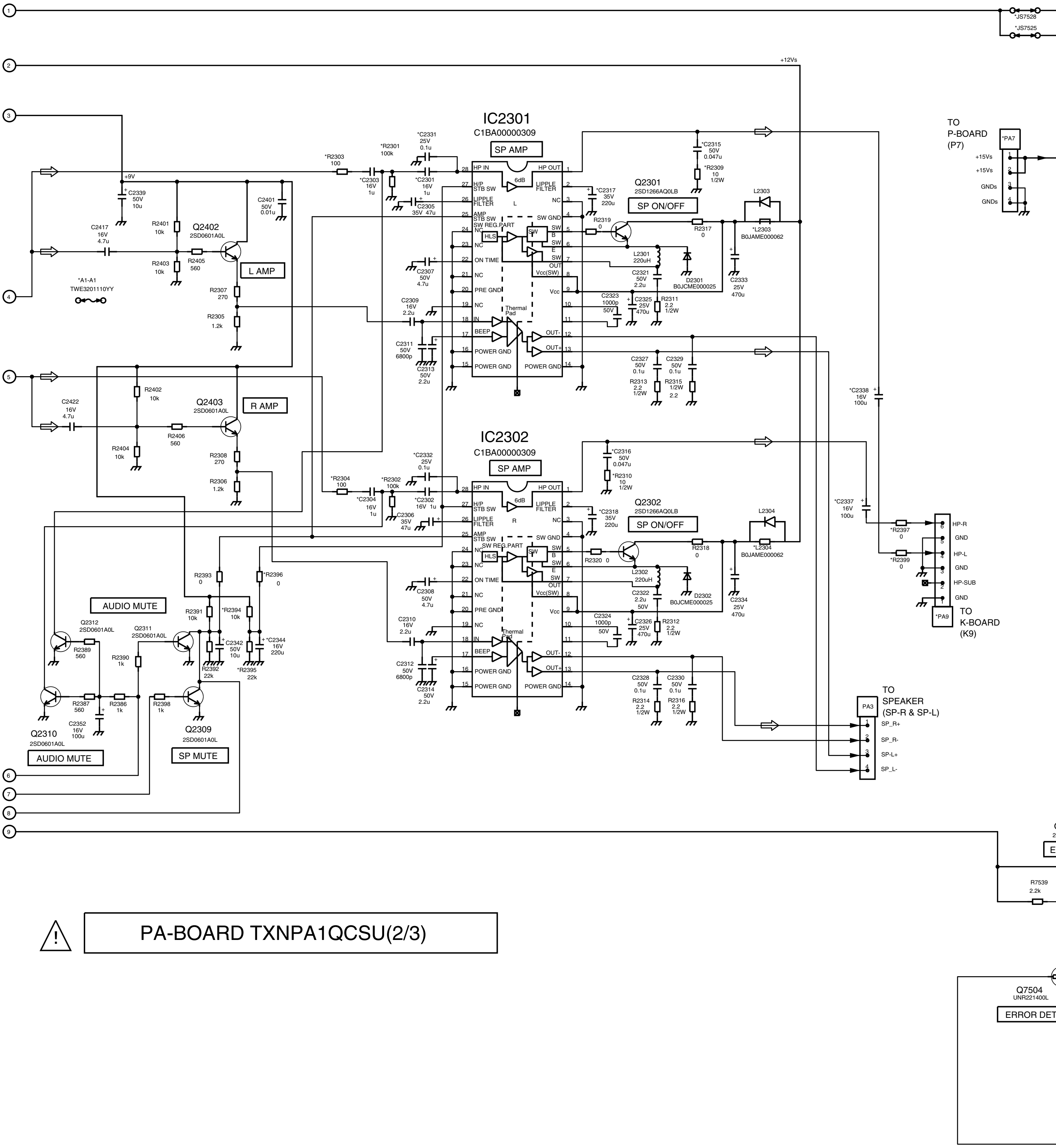
A
B
C
D
E
1
2
3
4
R2481 15k
R2438 100
Q2408 2SD0601A0L
L AMP
C2484 50V 0.01u
C2442 16V 0.22u
R2457 33k
R2480 1k
100Hz LPF
Q2406 2SD0601A0L
C2431 50V 0.01u
C2429 16V 100u
R2439 56k
C2423 50V 0.01u
C2426 50V 0.015u
R2434 4.7k
R2431 12k
C2419 16V 10u
R2448 1k
R2440 0
C2427 16V 10u
R2445 0
R2441 12k
C2480 16V 0.22u
R2482 15k
R2464 100
Q2410 2SD0601A0L
R AMP
R2471 1.8k
C2440 16V 4.7u
R2470 4.7k
R2484 33k
R2483 1k
TO DG-BOARD (DG6)
PA6
1 L_IN
2 GND
3 R_IN
4 GND
5 NC
6 GND
7 SUBMONO
8 GND
9 SUBVOL
10 SUBMUTE
11 (AMUTE)
12 GND
13 SCL1
14 SDA1
15 GND
16 SP_MUTE
17 STB5V
18 RESET
19 POFF_DEF
20 MAIN_DEF

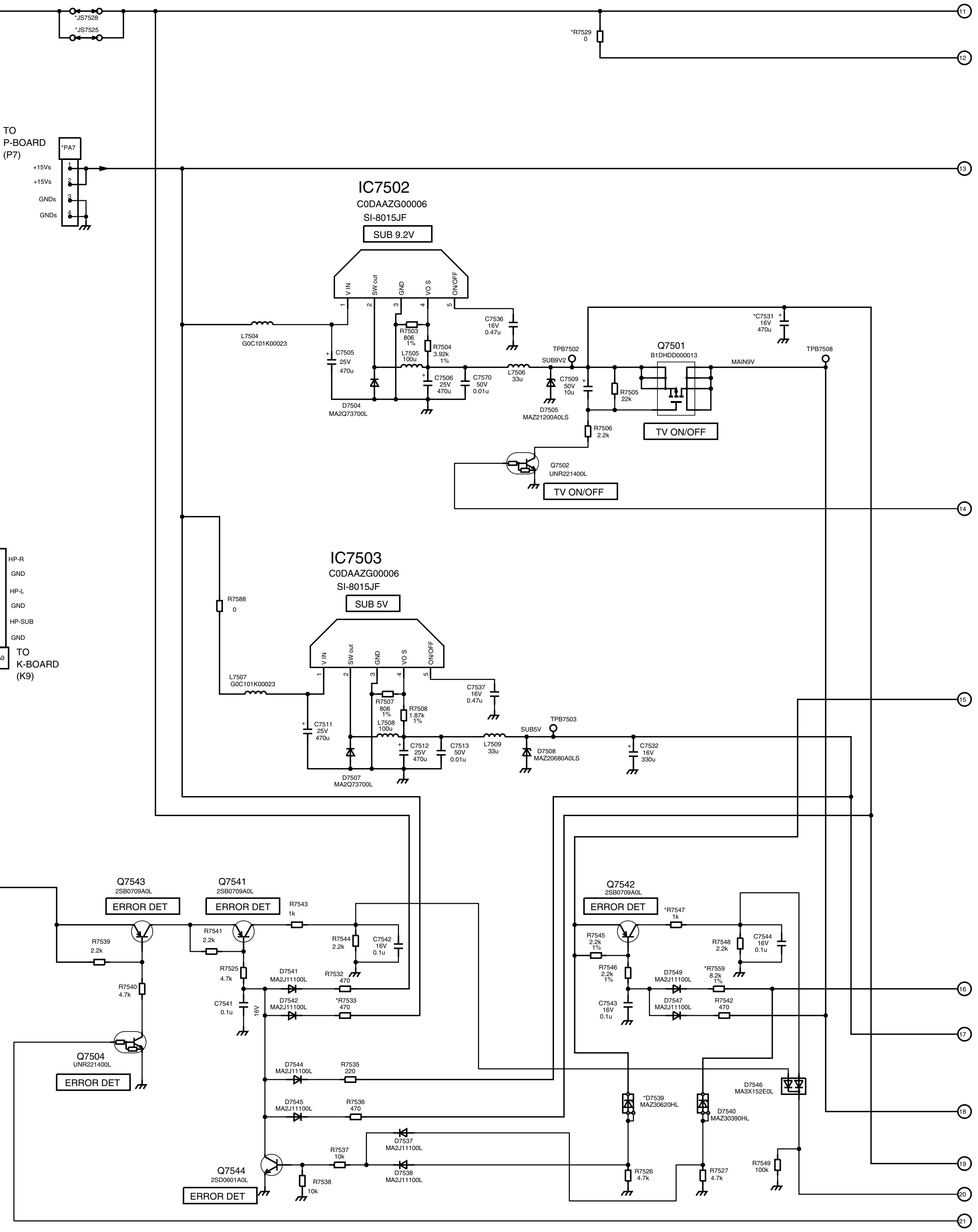
TH-42PA20U
PA-Board(1of3)Schematic Diagram


TO
P-BOARD
(P5)
PA5
12V
12V
5V
STB5V
GND
GND
+12Vs
+12Vs
GNDs
GNDs
DR15V
JS2107
JS2106
C2381
50V
10u
IC2304
AN7709SP-E1
AVR 9V
+12Vs
*JS2301
IN
OUT
COMMON
C2413
50V
47u
L2306
ELJPA100KF
C2414
16V
47u
*D2316
B0JCME000025
+9V
+9V
+9V
R2473
1.8k
R2472
4.7k
C2441
16V
4.7u
R2462
100
C2433
50V
0.039u
R2453
10k
R2456
10k
C2436
16V
1u
C2434
50V
0.022u
R2452
47k
*JS2308
*JS2307
C2431
50V
0.01u
C2429
16V
100u
R2439
56k
R2450
56k
C2426
50V
0.015u
C2437
16V
100u
C2435
50V
0.01u
C2459
16V
C2454
25V 4.7u
C2458
50V 1000p
C2460
50V 0.047u
R2469
100k
IC2401
C1BA00000302
AUDIO AMP
L_IN
VCC
C_IN
ADD
B_IN
MS_IN
B_GAIN
STT
LT
LB
CT
CB
L_OUT
C_OUT
SCV
PORT
R_IN
A_GND
AGC_ADJ(4.2V)
LS1
LS2
S_OUT
PS
V_REF
STB
RT
RB
R_OUT
SRV
SLV
SCL
SDA
R2448
1k
C2427
16V
10u
R2445
0
C2440
16V
4.7u
R2461
100
R2470
4.7k
R2460
18k
1%
R2463
15k
1%
R2466
100k
C2450
16V 10u
C2451
25V 4.7u
R2467
220k
R2468
4.7k
C2462
50V 5600p
C2453
50V 0.1u
C2438
16V 100u
C2457
25V 4.7u
*C2461
50V 1000p
C2463
50V 0.047u
R2476
22
R2477
22
C2466
16V
1u
C2467
16V
1u
R2348
10k
R2347
12k
R2346
12k
Q2306
2SD0601A0L
POWER ON MUTE
STB5V
SCL1
SDA1
MUTE
R2375
10k
R2376
22k
Q2305
2SD0601A0L
POWER ON MUTE
STB5V
Q2303
2SD0601A0L
RESET
RESET
R2372
22k
Q2304
2SD0601A0L
RESET
R2373
5.6k
R2374
100k
R2371
180k
D2313
MA3X152K0L
D2310
MA3X152K0L
POFF-DEF
JS2304
MAIN_DEF
R2377
470
Q2308
2SD0601A0L
MAIN DEF
R2378
100k
D2311
MA3X152K0L
R2494
820
1/2W
D2312
MA3X152K0L
C2382
16V
100u
①
②
③
④
⑤
⑥
⑦
⑧
⑨

TH-42PA20U
PA-Board(1of3)Schematic Diagram

14.8. PA-Board (2 of 3) Schematic Diagram

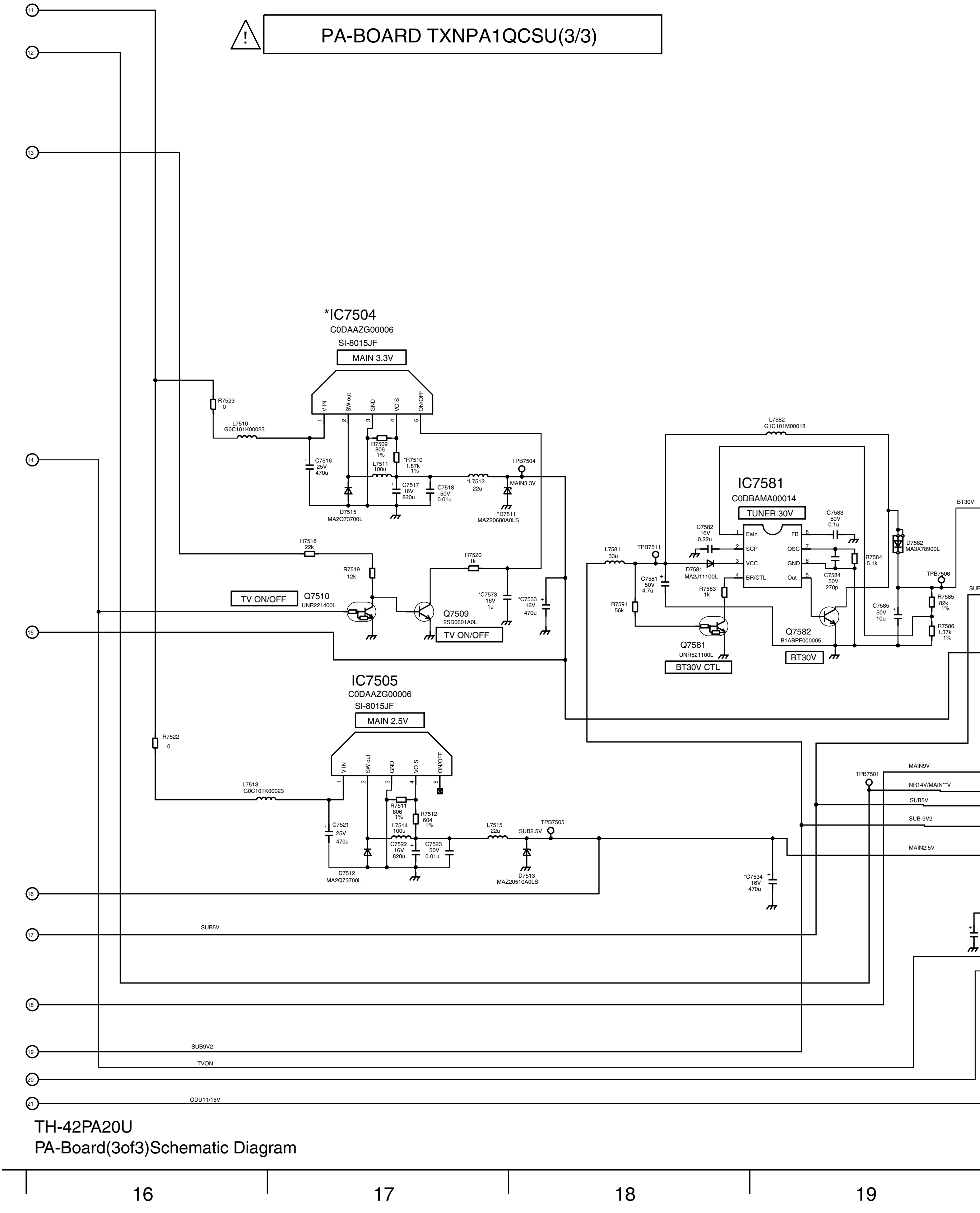

IC2301
C1BA00000309
SP AMP
IC2302
C1BA00000309
SP AMP
HP IN
HP OUT
H/P STB SW
LIPPLE FILTER
AMP STB SW
SW REG.PART
SW GND
NC
ON TIME
PRE GND
Vcc(SW)
Vcc
IN
BEEP
POWER GND
OUT-
OUT+
Thermal Pad
HLS
SW
6dB
L
R
Q2301
2SD1266AQ0LB
SP ON/OFF
Q2302
2SD1266AQ0LB
SP ON/OFF
Q2402
2SD0601A0L
L AMP
Q2403
2SD0601A0L
R AMP
AUDIO MUTE
Q2312
2SD0601A0L
Q2311
2SD0601A0L
Q2310
2SD0601A0L
AUDIO MUTE
Q2309
2SD0601A0L
SP MUTE
L2303
*L2303
B0JAME000062
L2304
*L2304
B0JAME000062
L2301
220uH
L2302
220uH
D2301
B0JCME000025
D2302
B0JCME000025
+9V
+12Vs
*JS7528
*JS7525
*A1-A1
TWE3201110YY
TO
P-BOARD
(P7)
*PA7
+15Vs
+15Vs
GNDs
GNDs
TO
K-BOARD
(K9)
*PA9
HP-R
GND
HP-L
GND
HP-SUB
GND
TO
SPEAKER
(SP-R & SP-L)
PA3
SP_R+
SP_R-
SP-L+
SP_L-
R7539
2.2k
Q7504
UNR221400L
ERROR DET
1
2
3
4
5
6
7
8
9
PA-BOARD TXNPA1QCSU(2/3)


*JS7528
*JS7525
*R7529
0
TO
P-BOARD
(P7)
*PA7
+15Vs
+15Vs
GNDs
GNDs
IC7502
C0DAAZG00006
SI-8015JF
SUB 9.2V
V IN
SW out
GND
VO S
ON/OFF
C7536
16V
0.47u
L7504
G0C101K00023
C7505
25V
470u
R7503
806
1%
R7504
3.92k
1%
L7505
100u
C7506
25V
470u
C7570
50V
0.01u
L7506
33u
D7504
MA2Q73700L
TPB7502
SUB9V2
C7509
50V
10u
D7505
MAZ21200A0LS
R7505
22k
*C7531
16V
470u
Q7501
B1DHDD000013
MAIN9V
TPB7508
R7506
2.2k
TV ON/OFF
Q7502
UNR221400L
TV ON/OFF
HP-R
GND
HP-L
GND
HP-SUB
GND
TO
K-BOARD
(K9)
IC7503
C0DAAZG00006
SI-8015JF
SUB 5V
R7588
0
L7507
G0C101K00023
C7537
16V
0.47u
C7511
25V
470u
R7507
806
1%
R7508
1.87k
1%
L7508
100u
C7512
25V
470u
C7513
50V
0.01u
L7509
33u
SUB5V
TPB7503
D7508
MAZ20680A0LS
C7532
16V
330u
D7507
MA2Q73700L
Q7543
2SB0709A0L
ERROR DET
Q7541
2SB0709A0L
ERROR DET
R7543
1k
R7539
2.2k
R7541
2.2k
R7544
2.2k
C7542
16V
0.1u
R7540
4.7k
R7525
4.7k
D7541
MA2J11100L
R7532
470
C7541
0.1u
16V
D7542
MA2J11100L
*R7533
470
Q7504
UNR221400L
ERROR DET
D7544
MA2J11100L
R7535
220
D7545
MA2J11100L
R7536
470
D7537
MA2J11100L
R7537
10k
D7538
MA2J11100L
Q7544
2SD0601A0L
ERROR DET
R7538
10k
Q7542
2SB0709A0L
ERROR DET
*R7547
1k
R7545
2.2k
1%
R7548
2.2k
C7544
16V
0.1u
R7546
2.2k
1%
D7549
MA2J11100L
*R7559
8.2k
1%
C7543
16V
0.1u
D7547
MA2J11100L
R7542
470
D7546
MA3X152E0L
*D7539
MAZ30620HL
D7540
MAZ30390HL
R7526
4.7k
R7527
4.7k
R7549
100k
11
12
13
14
15
16
17
18
19
20
21

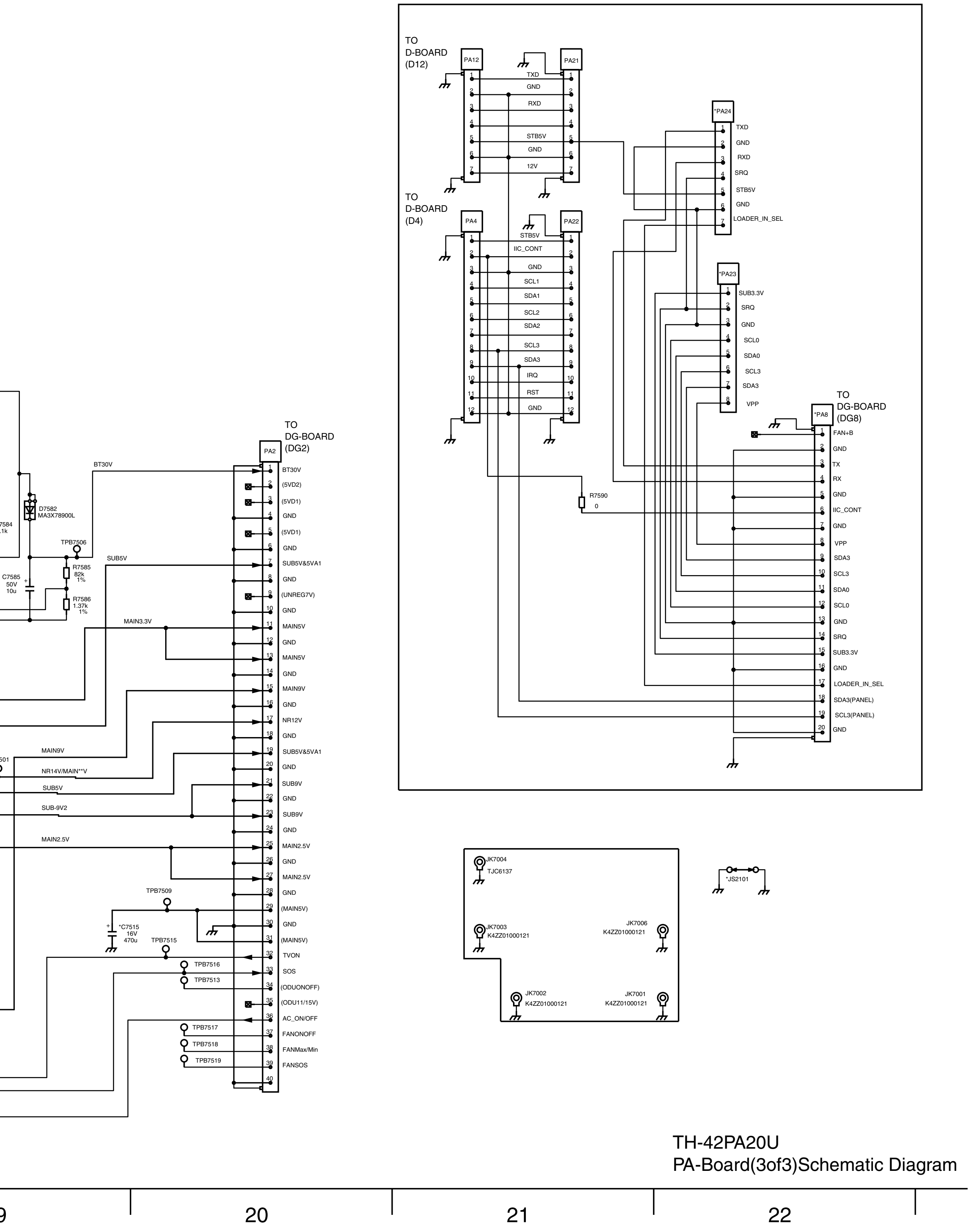
TH-42PA20U
PA-Board(2of3)Schematic Diagram

12 13 14 15

14.9. PA-Board (3 of 3) Schematic Diagram

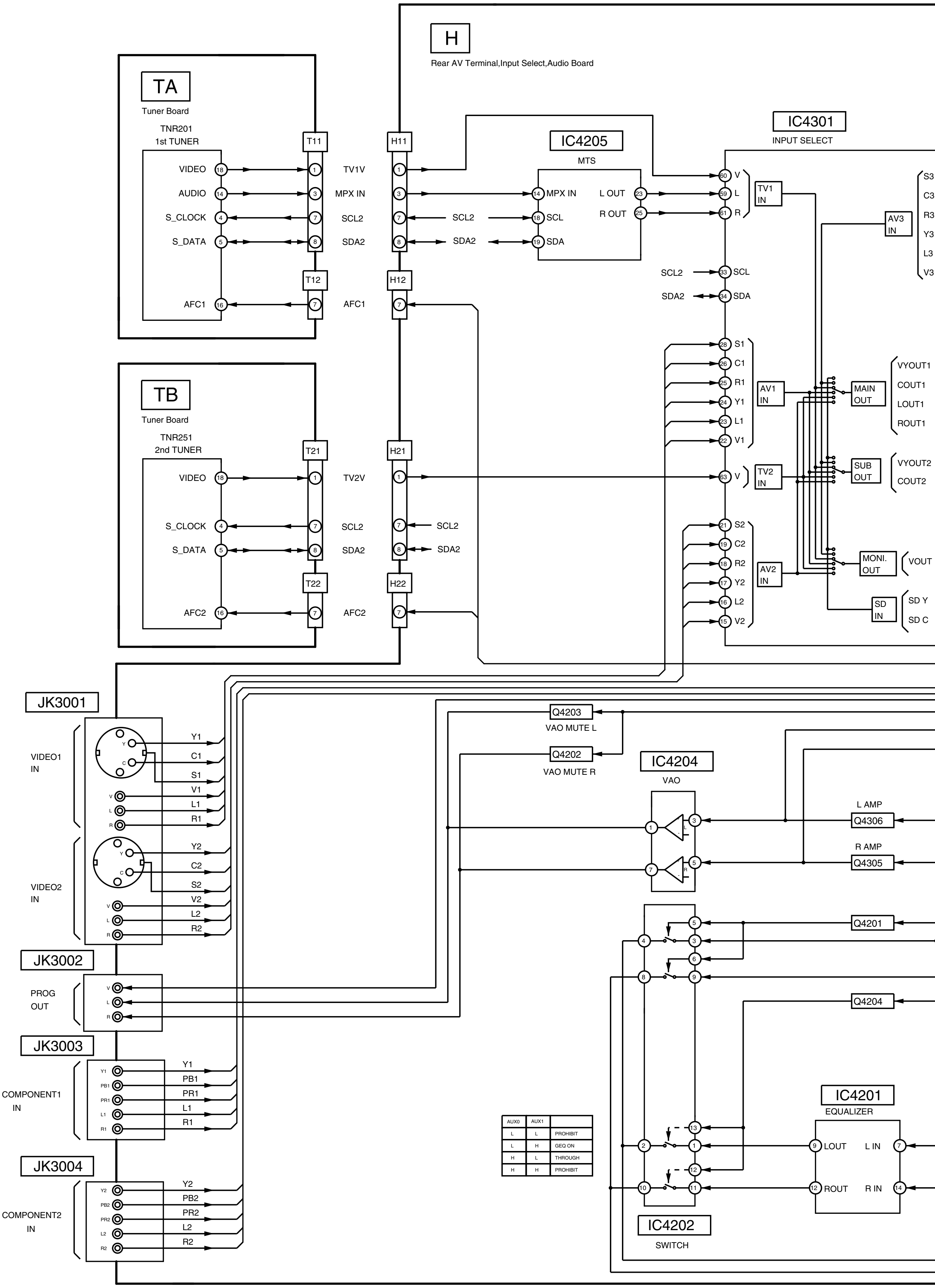

PA-BOARD TXNPA1QCSU(3/3)
*IC7504
C0DAAZG00006
SI-8015JF
MAIN 3.3V
V IN
SW out
GND
VO S
ON/OFF
R7523 0
L7510 G0C101K00023
C7516 25V 470u
R7509 806 1%
*R7510 1.87k 1%
L7511 100u
C7517 16V 820u
C7518 50V 0.01u
*L7512 22u
TPB7504
MAIN3.3V
D7515 MA2Q73700L
*D7511 MAZ20680A0LS
R7518 22k
R7519 12k
R7520 1k
TV ON/OFF
Q7510 UNR221400L
Q7509 2SD0601A0L
TV ON/OFF
*C7573 16V 1u
*C7533 16V 470u
IC7505
C0DAAZG00006
SI-8015JF
MAIN 2.5V
R7522 0
L7513 G0C101K00023
C7521 25V 470u
R7511 806 1%
R7512 604 1%
L7514 100u
C7522 16V 820u
C7523 50V 0.01u
L7515 22u
SUB2.5V
TPB7505
D7512 MA2Q73700L
D7513 MAZ20510A0LS
*C7534 16V 470u
L7582 G1C101M00018
IC7581
C0DBAMA00014
TUNER 30V
EaIn
SCP
VCC
BR/CTL
FB
OSC
GND
Out
C7583 50V 0.1u
C7582 16V 0.22u
L7581 33u
TPB7511
C7581 50V 4.7u
D7581 MA2J11100L
R7583 1k
R7591 56k
R7584 5.1k
C7584 50V 270p
Q7581 UNR521100L
BT30V CTL
Q7582 B1ABPF000005
BT30V
D7582 MA3X78900L
C7585 50V 10u
TPB7506
R7585 82k 1%
R7586 1.37k 1%
BT30V
SUB
TPB7501
MAIN9V
NR14V/MAIN**V
SUB5V
SUB-9V2
MAIN2.5V
SUB5V
SUB9V2
TVON
ODU11/15V
11
12
13
14
15
16
17
18
19
20
21
16
17
18
19

TH-42PA20U
PA-Board(3of3)Schematic Diagram

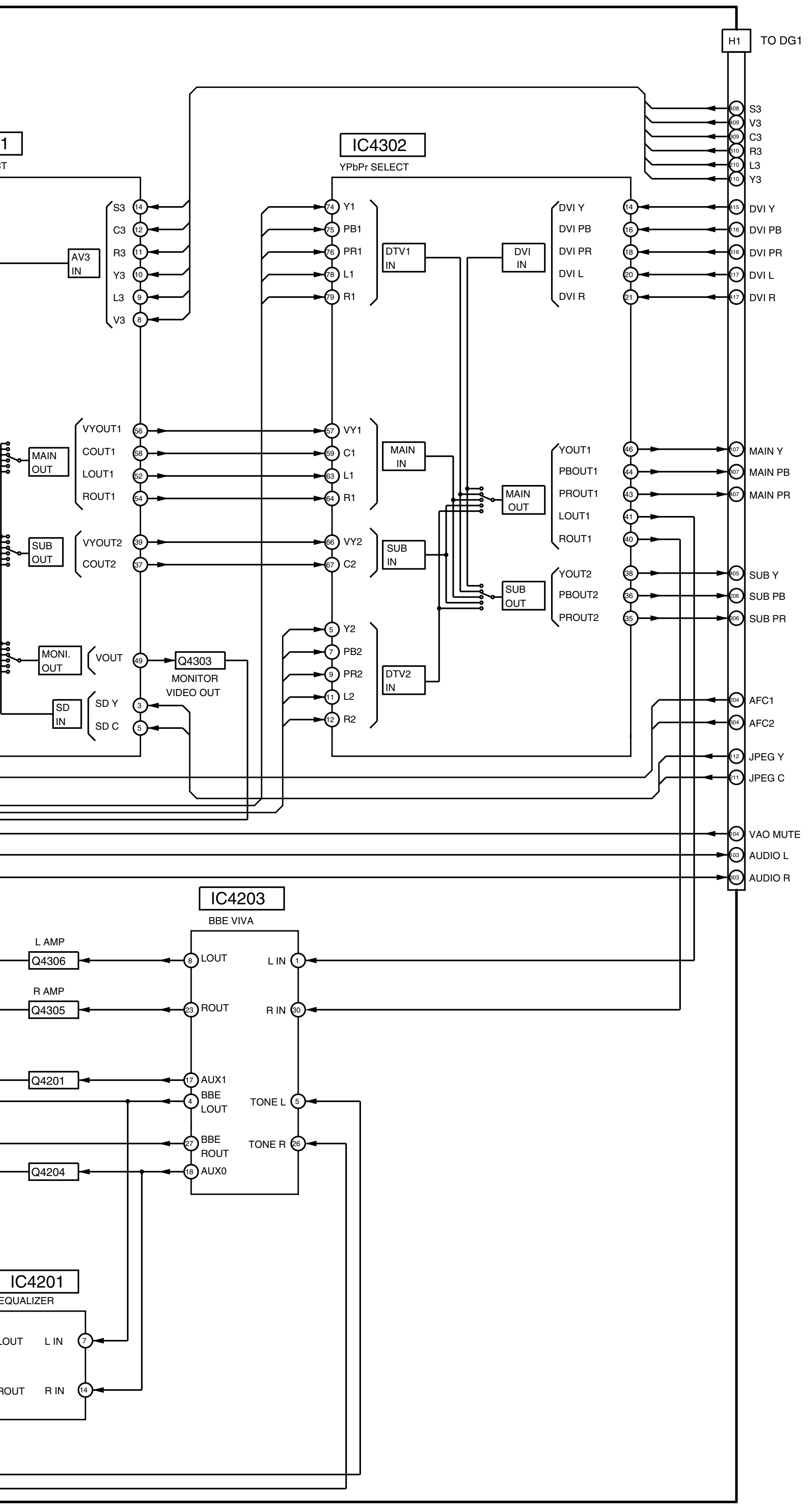

TO
D-BOARD
(D12)
PA12
PA21
TXD
GND
RXD
STB5V
GND
12V
*PA24
TXD
GND
RXD
SRQ
STB5V
GND
LOADER_IN_SEL
TO
D-BOARD
(D4)
PA4
PA22
STB5V
IIC_CONT
GND
SCL1
SDA1
SCL2
SDA2
SCL3
SDA3
IRQ
RST
GND
*PA23
SUB3.3V
SRQ
GND
SCL0
SDA0
SCL3
SDA3
VPP
TO
DG-BOARD
(DG8)
*PA8
FAN+B
GND
TX
RX
GND
IIC_CONT
GND
VPP
SDA3
SCL3
SDA0
SCL0
GND
SRQ
SUB3.3V
GND
LOADER_IN_SEL
SDA3(PANEL)
SCL3(PANEL)
GND
R7590
0
TO
DG-BOARD
(DG2)
PA2
BT30V
BT30V
(5VD2)
(5VD1)
GND
(5VD1)
GND
SUB5V&5VA1
GND
(UNREG7V)
GND
MAIN5V
GND
MAIN5V
GND
MAIN9V
GND
NR12V
GND
SUB5V&5VA1
GND
SUB9V
GND
SUB9V
GND
MAIN2.5V
GND
MAIN2.5V
GND
(MAIN5V)
GND
(MAIN5V)
TVON
SOS
(ODUONOFF)
(ODU11/15V)
AC_ON/OFF
FANONOFF
FANMax/Min
FANSOS
D7582
MA3X78900L
7584
.1k
TPB7506
R7585
82k
1%
C7585
50V
10u
R7586
1.37k
1%
SUB5V
MAIN3.3V
MAIN9V
501
NR14V/MAIN**V
SUB5V
SUB-9V2
MAIN2.5V
TPB7509
*C7515
16V
470u
TPB7515
TPB7516
TPB7513
TPB7517
TPB7518
TPB7519
JK7004
TJC6137
JK7003
K4ZZ01000121
JK7006
K4ZZ01000121
JK7002
K4ZZ01000121
JK7001
K4ZZ01000121
*JS2101
9
20
21
22

TH-42PA20U
PA-Board(3of3)Schematic Diagram

14.10. H, TA and TB-Board Block Diagram


H
Rear AV Terminal,Input Select,Audio Board
TA
Tuner Board
TNR201
1st TUNER
VIDEO
AUDIO
S_CLOCK
S_DATA
AFC1
T11
T12
TV1V
MPX IN
SCL2
SDA2
AFC1
H11
H12
IC4205
MTS
MPX IN
SCL
SDA
L OUT
R OUT
IC4301
INPUT SELECT
V
L
R
TV1 IN
SCL2
SDA2
SCL
SDA
S1
C1
R1
Y1
L1
V1
AV1 IN
TV2 IN
S2
C2
R2
Y2
L2
V2
AV2 IN
AV3 IN
S3
C3
R3
Y3
L3
V3
MAIN OUT
SUB OUT
MONI. OUT
SD IN
VYOUT1
COUT1
LOUT1
ROUT1
VYOUT2
COUT2
VOUT
SD Y
SD C
TB
Tuner Board
TNR251
2nd TUNER
VIDEO
S_CLOCK
S_DATA
AFC2
T21
T22
TV2V
SCL2
SDA2
AFC2
H21
H22
JK3001
VIDEO1 IN
VIDEO2 IN
Y1
C1
S1
V1
L1
R1
Y2
C2
S2
V2
L2
R2
JK3002
PROG OUT
JK3003
COMPONENT1 IN
Y1
PB1
PR1
L1
R1
JK3004
COMPONENT2 IN
Y2
PB2
PR2
L2
R2
Q4203
VAO MUTE L
Q4202
VAO MUTE R
IC4204
VAO
L AMP
Q4306
R AMP
Q4305
Q4201
Q4204
IC4201
EQUALIZER
LOUT
ROUT
L IN
R IN
IC4202
SWITCH
AUX0
AUX1
L L PROHIBIT
L H GEQ ON
H L THROUGH
H H PROHIBIT

TH-42PA20U H,TA and TB-Board Block Diagram


H1
TO DG1
S3
V3
C3
R3
L3
Y3
DVI Y
DVI PB
DVI PR
DVI L
DVI R
MAIN Y
MAIN PB
MAIN PR
SUB Y
SUB PB
SUB PR
AFC1
AFC2
JPEG Y
JPEG C
VAO MUTE
AUDIO L
AUDIO R
IC4302
YPbPr SELECT
Y1
PB1
PR1
L1
R1
DTV1 IN
DVI IN
VY1
C1
L1
R1
MAIN IN
MAIN OUT
VY2
C2
SUB IN
SUB OUT
Y2
PB2
PR2
L2
R2
DTV2 IN
YOUT1
PBOUT1
PROUT1
LOUT1
ROUT1
YOUT2
PBOUT2
PROUT2
S3
C3
R3
Y3
L3
V3
AV3 IN
VYOUT1
COUT1
LOUT1
ROUT1
MAIN OUT
VYOUT2
COUT2
SUB OUT
MONI. OUT
VOUT
Q4303
MONITOR VIDEO OUT
SD IN
SD Y
SD C
IC4203
BBE VIVA
L AMP
Q4306
LOUT
L IN
R AMP
Q4305
ROUT
R IN
Q4201
AUX1
BBE LOUT
TONE L
BBE ROUT
TONE R
Q4204
AUX0
IC4201
EQUALIZER
LOUT
L IN
ROUT
R IN

TH-42PA20U H,TA and TB-Board Block Diagram

14.11. TA and TB-Board Schematic Diagram

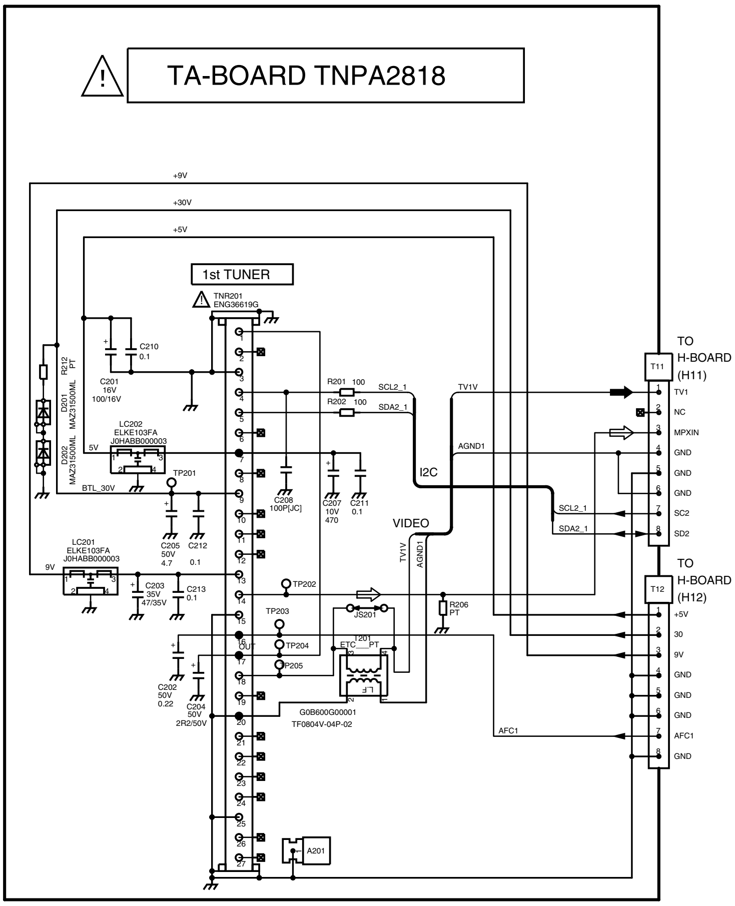
A

B

C

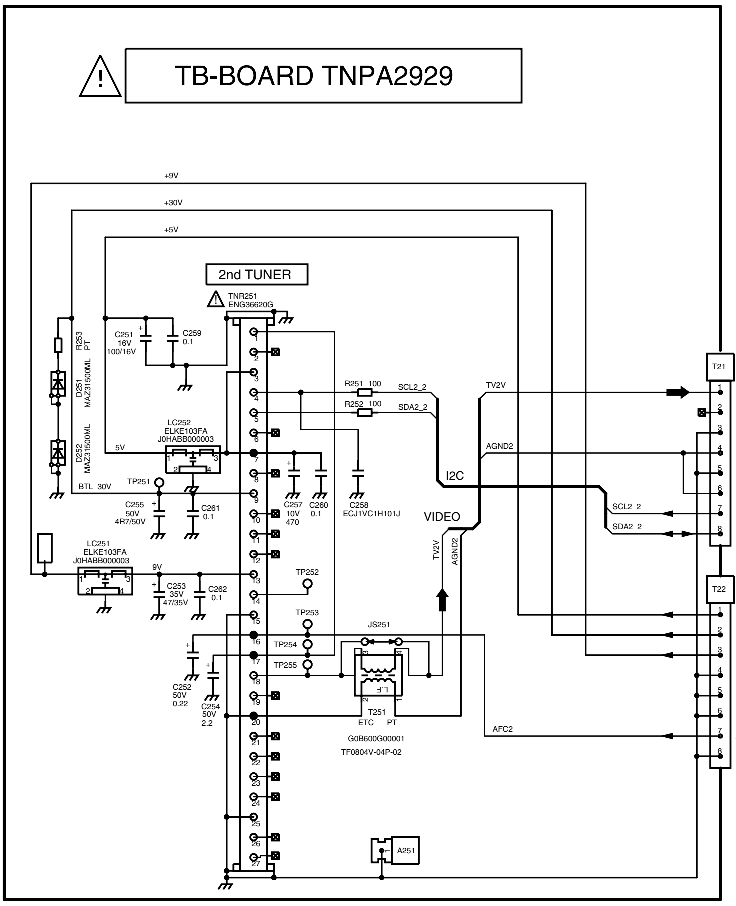
D

E


TA-BOARD TNPA2818
+9V
+30V
+5V
1st TUNER
TNR201
ENG36619G
C210
0.1
C201
16V
100/16V
R212
PT
D201
MAZ31500ML
D202
MAZ31500ML
LC202
ELKE103FA
J0HABB000003
5V
BTL_30V
TP201
C205
50V
4.7
C212
0.1
LC201
ELKE103FA
J0HABB000003
9V
C203
35V
47/35V
C213
0.1
C202
50V
0.22
C204
50V
2R2/50V
R201 100
R202 100
SCL2_1
SDA2_1
C208
100P[JC]
C207
10V
470
C211
0.1
I2C
VIDEO
TV1V
AGND1
TP202
TP203
TP204
TP205
JS201
R206
PT
T201
ETC__PT
G0B600G00001
TF0804V-04P-02
AFC1
A201
OUT
TO
H-BOARD
(H11)
T11
TV1
NC
MPXIN
GND
GND
GND
SC2
SD2
TO
H-BOARD
(H12)
T12
+5V
30
9V
GND
GND
GND
AFC1
GND

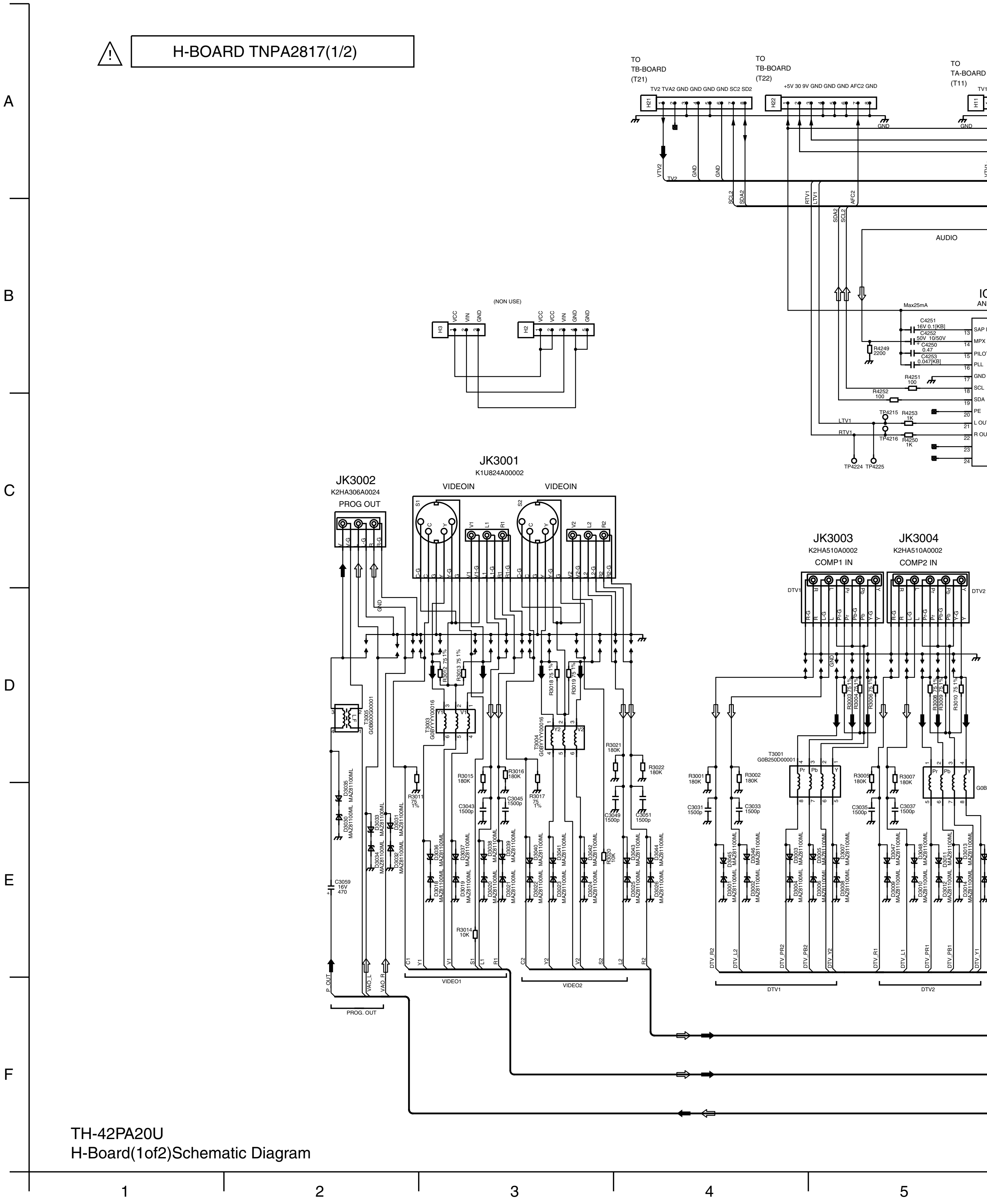
TH-42PA20U
TA and TB-Board Schematic Diagram

1 2 3 4

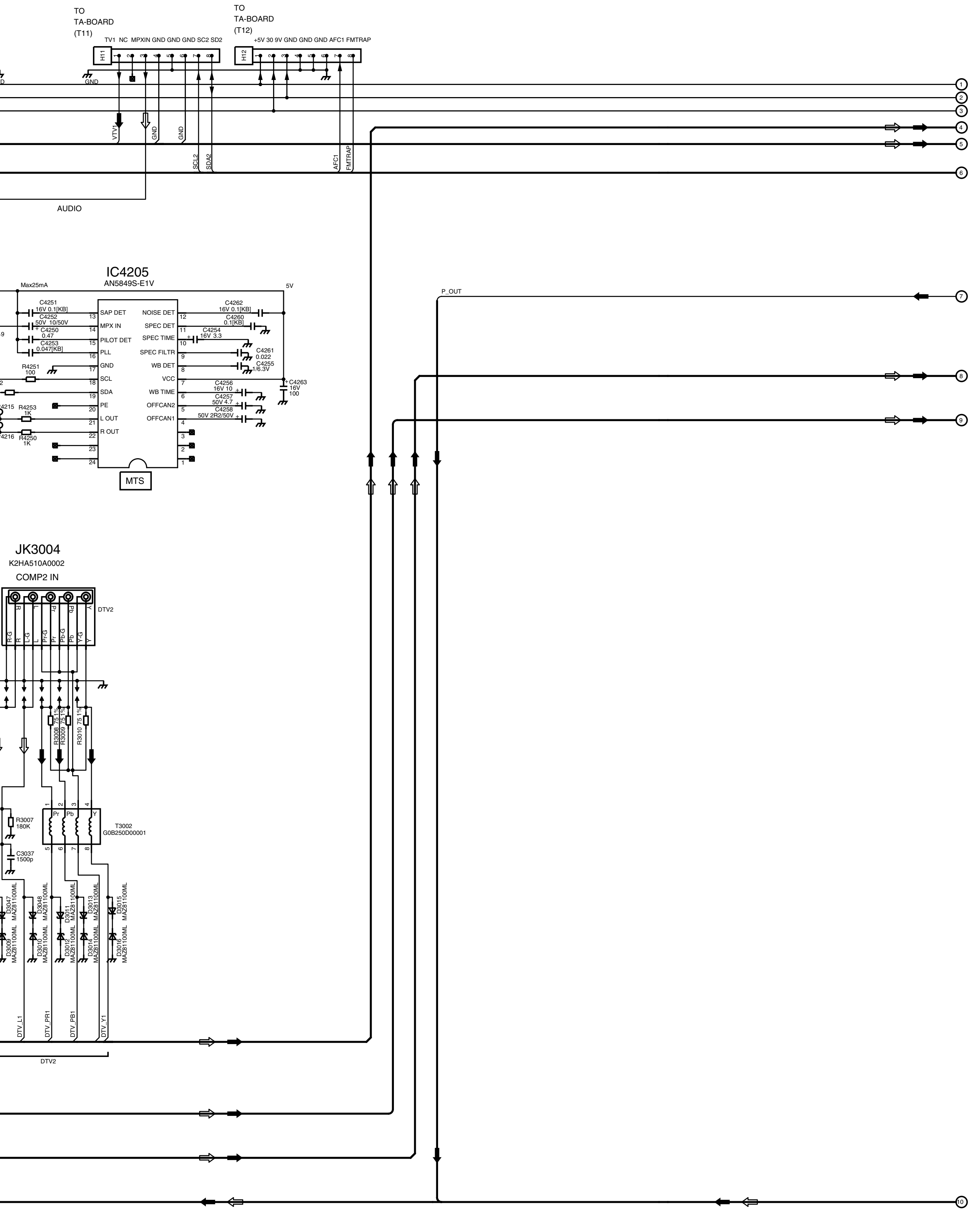

TB-BOARD TNPA2929
+9V
+30V
+5V
2nd TUNER
TNR251
ENG36620G
R253
PT
D251
MAZ31500ML
D252
MAZ31500ML
C251
16V
100/16V
C259
0.1
LC252
ELKE103FA
J0HABB000003
5V
BTL_30V
TP251
C255
50V
4R7/50V
C261
0.1
LC251
ELKE103FA
J0HABB000003
9V
C253
35V
47/35V
C262
0.1
C257
10V
470
C260
0.1
C258
ECJ1VC1H101J
R251 100
R252 100
SCL2_2
SDA2_2
TV2V
AGND2
I2C
VIDEO
TP252
TP253
TP254
TP255
JS251
C252
50V
0.22
C254
50V
2.2
T251
ETC___PT
G0B600G00001
TF0804V-04P-02
AFC2
A251
TO
H-BOARD
(H21)
T21
TV2
NC
GND
GND
GND
GND
SC2
SD2
TO
H-BOARD
(H22)
T22
+5V
30
9V
GND
GND
GND
AFC2
GND

TH-42PA20U
TA and TB-Board Schematic Diagram

14.12. H-Board (1 of 2) Schematic Diagram


H-BOARD TNPA2817(1/2)
A
B
C
D
E
F
1
2
3
4
5
TO TB-BOARD (T21)
TV2 TVA2 GND GND GND GND SC2 SD2
H21
TO TB-BOARD (T22)
+5V 30 9V GND GND GND AFC2 GND
H22
TO TA-BOARD (T11)
H11
VTV2
TV2
GND
SCL2
SDA2
RTV1
LTV1
AFC2
AUDIO
Max25mA
C4251 16V 0.1[KB]
C4252 50V 10/50V
C4250 0.47
C4253 0.047[KB]
R4249 2200
R4251 100
R4252 100
R4253 1K
R4250 1K
TP4215
TP4216
TP4224
TP4225
SAP
MPX
PILOT
PLL
GND
SCL
SDA
PE
L OUT
R OUT
(NON USE)
H3
H2
VCC
VIN
GND
JK3001
K1U824A00002
VIDEOIN
JK3002
K2HA306A0024
PROG OUT
JK3003
K2HA510A0002
COMP1 IN
JK3004
K2HA510A0002
COMP2 IN
DTV1
DTV2
T3003 G0BYYYY00016
T3004 G0BYYYY00016
T3005 G0B600G00001
T3001 G0B250D00001
R3012 75 1%
R3013 75 1%
R3018 75 1%
R3019 75 1%
R3003 75 1%
R3004 75 1%
R3006 75 1%
R3008 75 1%
R3009 75 1%
R3010 75 1%
R3011 75 1%
R3015 180K
R3016 180K
R3017 75 1%
R3021 180K
R3022 180K
R3001 180K
R3002 180K
R3005 180K
R3007 180K
R3014 10K
R3020 10K
C3043 1500p
C3045 1500p
C3049 1500p
C3051 1500p
C3031 1500p
C3033 1500p
C3035 1500p
C3037 1500p
C3059 16V 470
MAZ8100ML
P_OUT
VAO_L
VAO_R
PROG. OUT
C1
Y1
S1
L1
R1
VIDEO1
C2
Y2
S2
L2
R2
VIDEO2
DTV_R2
DTV_L2
DTV_PR2
DTV_PB2
DTV_Y2
DTV1
DTV_R1
DTV_L1
DTV_PR1
DTV_PB1
DTV_Y1
DTV2

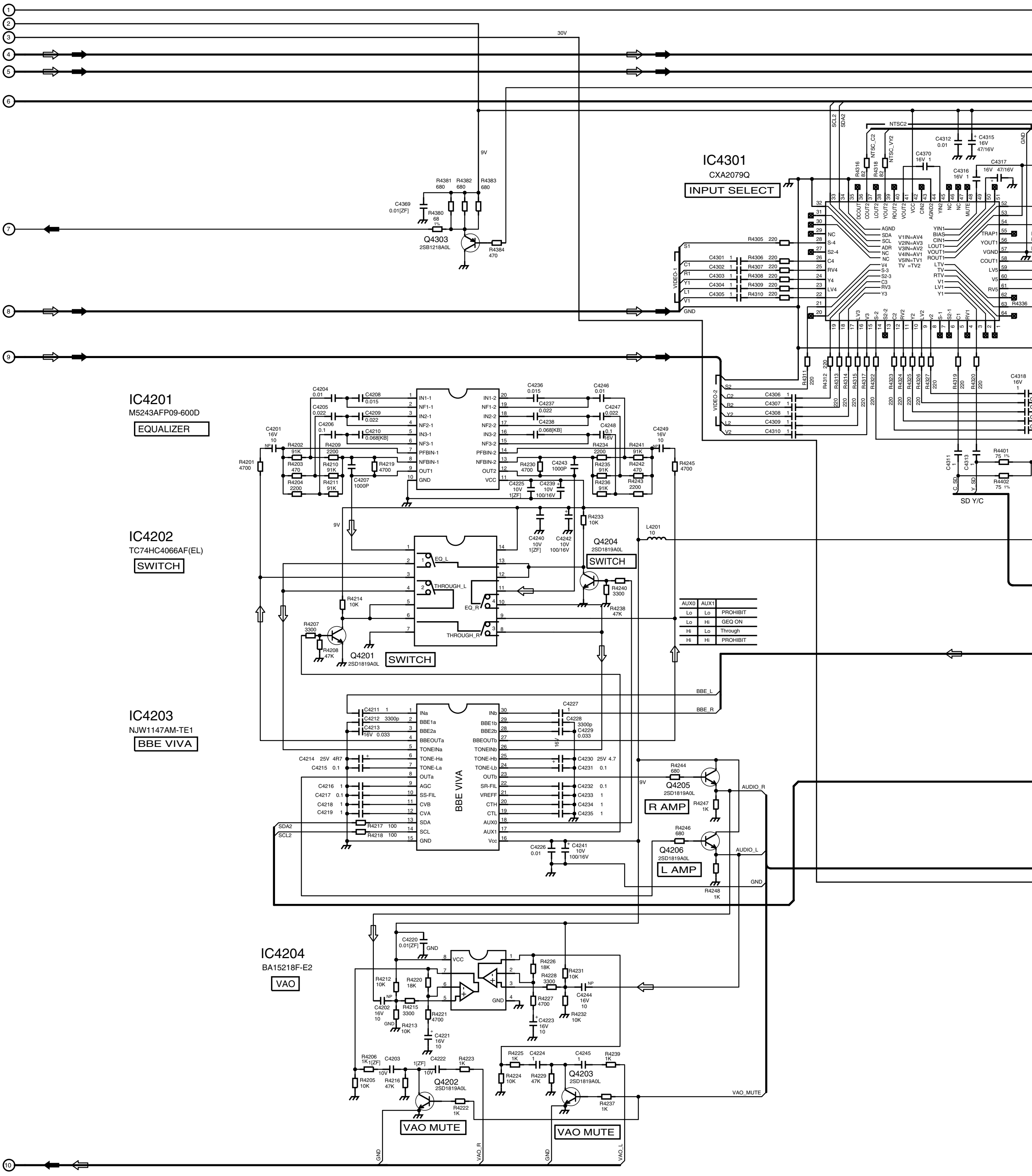
TH-42PA20U
H-Board(1of2)Schematic Diagram


TO
TA-BOARD
(T11)
TV1 NC MPXIN GND GND GND SC2 SD2
H11
TO
TA-BOARD
(T12)
+5V 30 9V GND GND GND AFC1 FMTRAP
H12
GND
VTV1
GND
GND
SCL2
SDA2
AFC1
FMTRAP
AUDIO
IC4205
AN5849S-E1V
Max25mA
5V
C4251 16V 0.1[KB]
C4252 50V 10/50V
C4250 0.47
C4253 0.047[KB]
R4251 100
R4253 1K
R4250 1K
SAP DET
MPX IN
PILOT DET
PLL
GND
SCL
SDA
PE
L OUT
R OUT
NOISE DET
SPEC DET
SPEC TIME
SPEC FILTR
WB DET
VCC
WB TIME
OFFCAN2
OFFCAN1
C4262 16V 0.1[KB]
C4260 0.1[KB]
C4254 16V 3.3
C4261 0.022
C4255 1/6.3V
C4256 16V 10
C4257 50V 4.7
C4258 50V 2R2/50V
C4263 16V 100
MTS
P_OUT
JK3004
K2HA510A0002
COMP2 IN
DTV2
R3008 75 1%
R3009 75 1%
R3010 75 1%
R3007 180K
C3037 1500p
T3002
G0B250D00001
Pr
Pb
Y
D3047 MAZ8100ML
D3048 MAZ8100ML
D3011 MAZ8100ML
D3013 MAZ8100ML
D3015 MAZ8100ML
D3009 MAZ8100ML
D3010 MAZ8100ML
D3012 MAZ8100ML
D3014 MAZ8100ML
D3016 MAZ8100ML
DTV_L1
DTV_PR1
DTV_PB1
DTV_Y1
DTV2
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

TH-42PA20U H-Board(1of2)Schematic Diagram

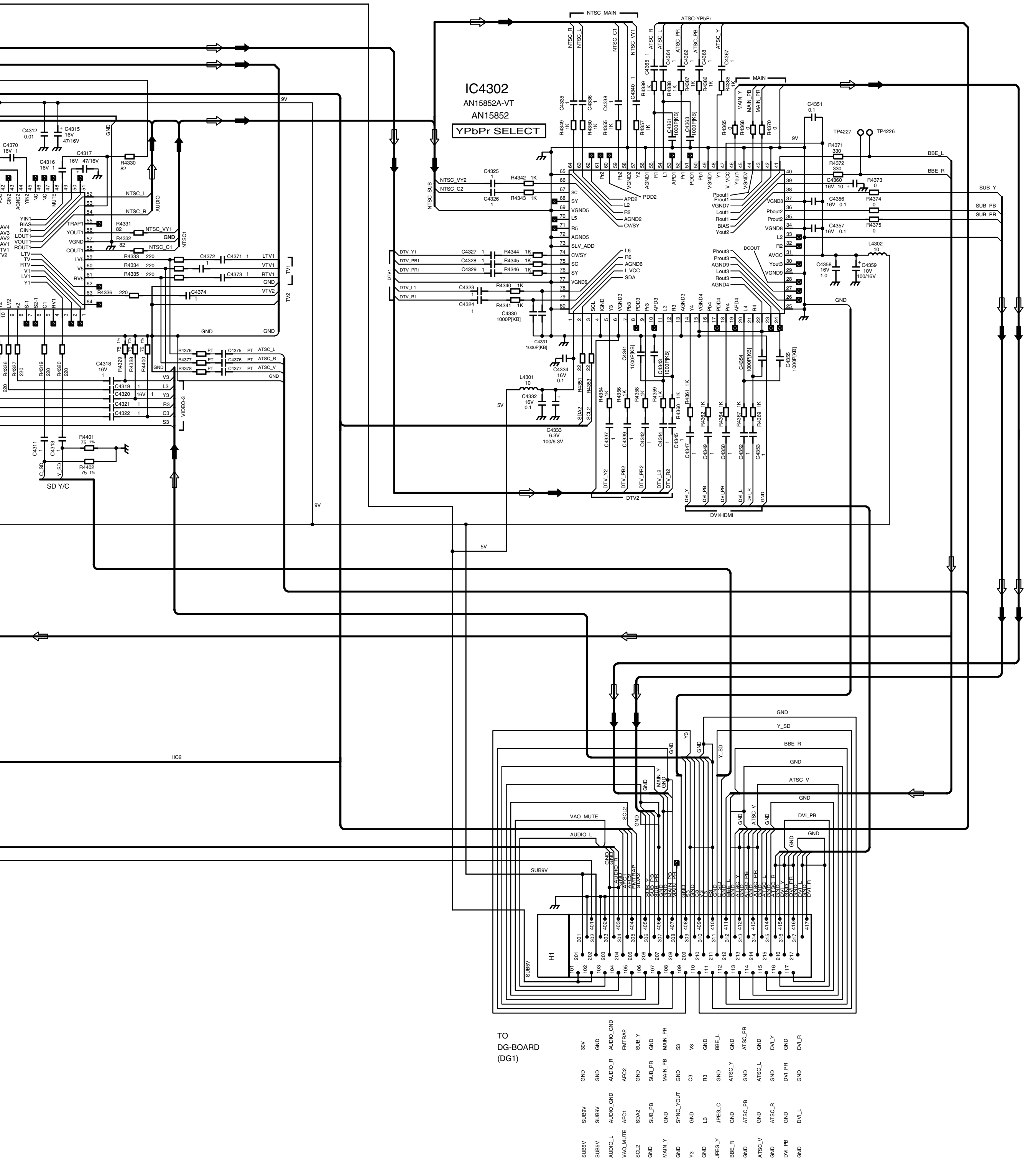
14.13. H-Board (2 of 2) Schematic Diagram

⚠ H-BOARD TNPA2817(2/2)


1
2
3
4
5
6
7
8
9
10
30V
9V
IC4301
CXA2079Q
INPUT SELECT
Q4303
2SB1218A0L
R4381 680
R4382 680
R4383 680
R4380 68
R4384 470
C4369 0.01[ZF]
VIDEO-1
VIDEO-2
NTSC2
SCL2
SDA2
SD Y/C
IC4201
M5243AFP09-600D
EQUALIZER
IC4202
TC74HC4066AF(EL)
SWITCH
Q4201
2SD1819A0L
SWITCH
Q4204
2SD1819A0L
SWITCH
EQ_L
THROUGH_L
EQ_R
THROUGH_R
AUX0
AUX1
Lo
Lo
PROHIBIT
Lo
Hi
GEQ ON
Hi
Lo
Through
Hi
Hi
PROHIBIT
IC4203
NJW1147AM-TE1
BBE VIVA
BBE VIVA
BBE_L
BBE_R
Q4205
2SD1819A0L
R AMP
Q4206
2SD1819A0L
L AMP
AUDIO_R
AUDIO_L
GND
IC4204
BA15218F-E2
VAO
Q4202
2SD1819A0L
VAO MUTE
Q4203
2SD1819A0L
VAO MUTE
VAO_MUTE
VAO_R
VAO_L
L4201 10

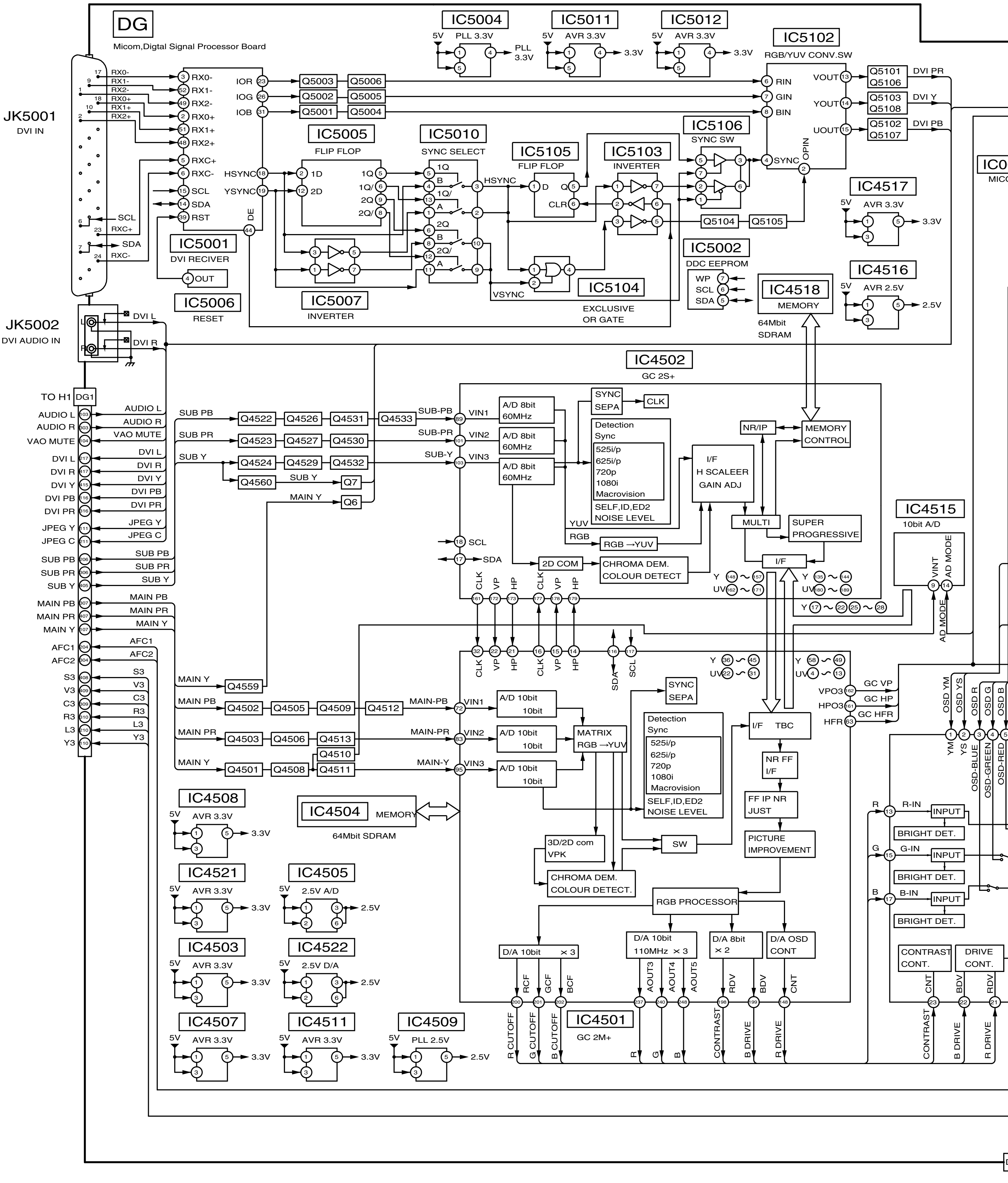
TH-42PA20U
H-Board(2of2)Schematic Diagram

10 11 12 13 14

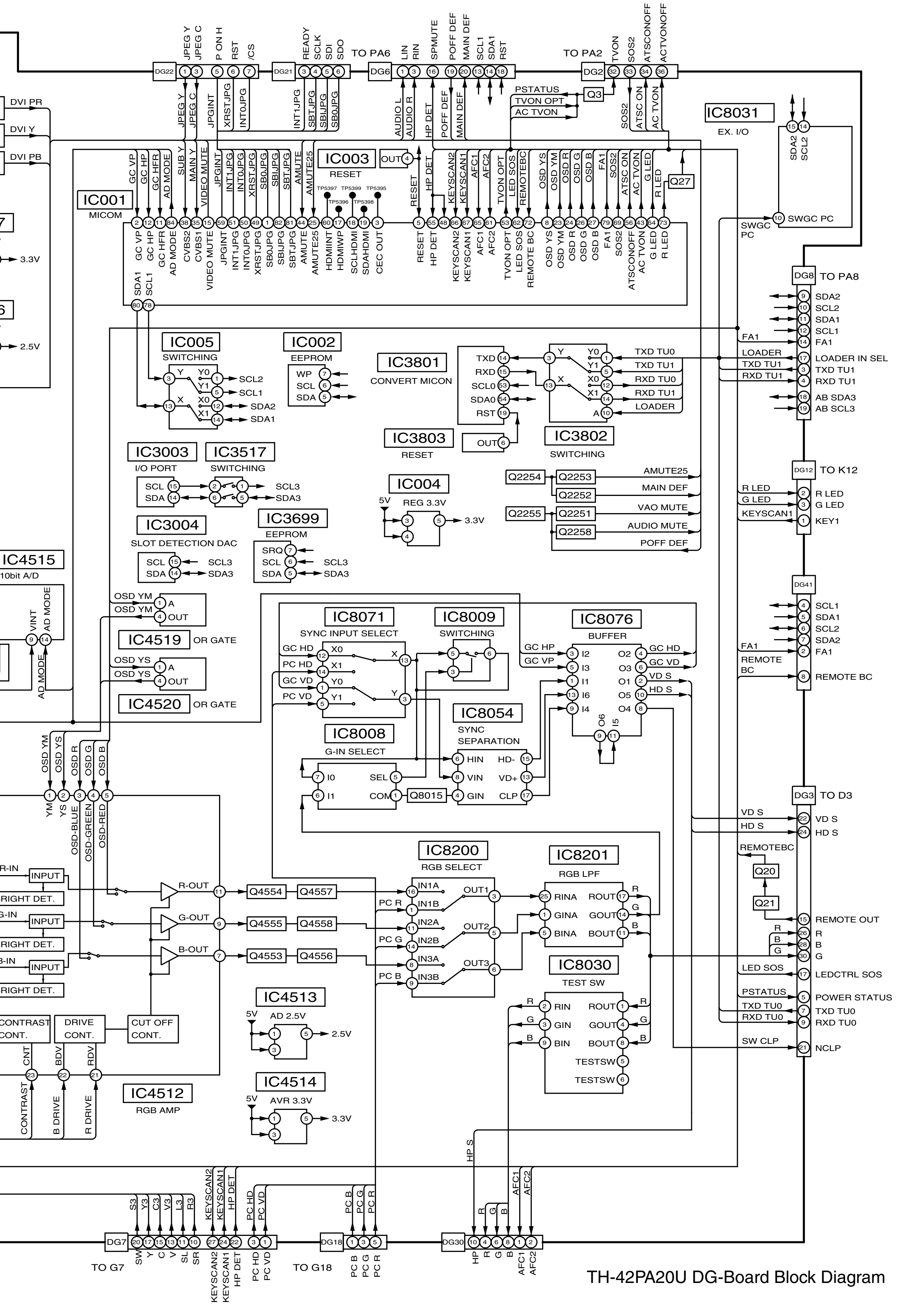

IC4302
AN15852A-VT
AN15852
YPbPr SELECT
NTSC_MAIN
ATSC-YPbPr
MAIN
NTSC_R
NTSC_L
NTSC_C1
NTSC_VY1
ATSC_R
ATSC_L
ATSC_PR
ATSC_PB
ATSC_Y
MAIN_Y
MAIN_PB
MAIN_PR
NTSC_SUB
NTSC_VY2
NTSC_C2
DTV1
DTV_Y1
DTV_PB1
DTV_PR1
DTV_L1
DTV_R1
DTV2
DTV_Y2
DTV_PB2
DTV_PR2
DTV_L2
DTV_R2
DVI/HDMI
DVI_Y
DVI_PB
DVI_PR
DVI_L
DVI_R
BBE_L
BBE_R
SUB_Y
SUB_PB
SUB_PR
TP4227
TP4226
9V
5V
GND
SD Y/C
TV1
TV2
NTSC1
AUDIO
VIDEO-3
IIC2
SDA2
SCL2
C4351 0.1
R4371 330
R4372 330
L4302 10
L4301 10
C4333 6.3V 100/6.3V
C4359 10V 100/16V
C4358 16V 1.0
VAO_MUTE
AUDIO_L
SUB9V
SUB5V
H1
TO
DG-BOARD
(DG1)
30V
GND
AUDIO_GND
FMTRAP
SUB_Y
GND
MAIN_PR
S3
V3
GND
BBE_L
GND
ATSC_PR
GND
DVI_Y
GND
DVI_R
GND
GND
AUDIO_R
AFC2
GND
SUB_PR
MAIN_PB
GND
C3
R3
GND
ATSC_Y
GND
ATSC_L
GND
DVI_PR
GND
SUB9V
SUB9V
AUDIO_GND
AFC1
SDA2
SUB_PB
GND
SYNC_YOUT
GND
L3
JPEG_C
GND
ATSC_PB
GND
ATSC_R
GND
DVI_L
SUB5V
SUB5V
AUDIO_L
VAO_MUTE
SCL2
GND
MAIN_Y
GND
Y3
GND
JPEG_Y
BBE_R
GND
ATSC_V
GND
DVI_PB
GND
14
15
16
17
18

TH-42PA20U H-Board(2of2)Schematic Diagram

14.14. DG-Board Block Diagram

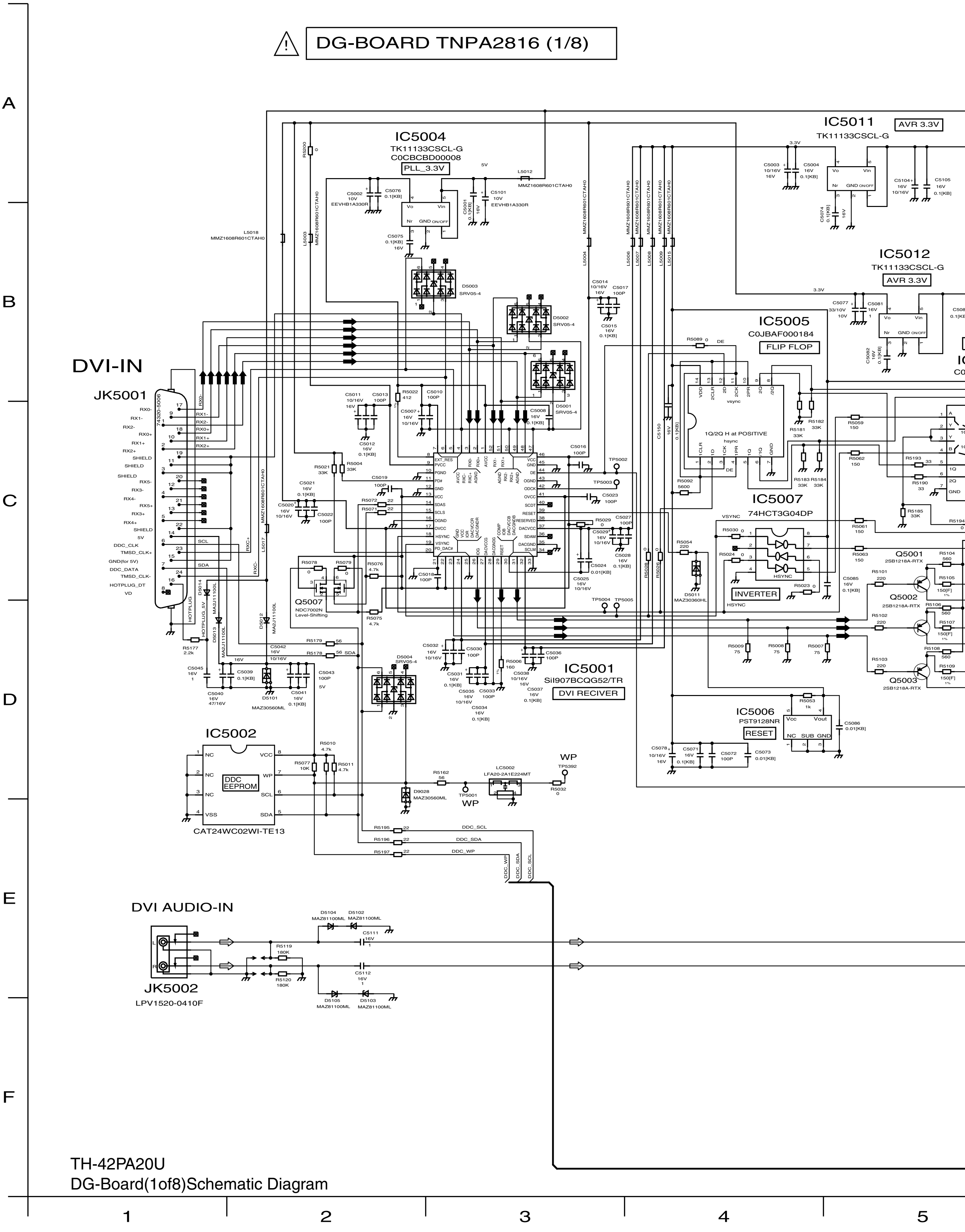

DG
Micom,Digtal Signal Processor Board
JK5001
DVI IN
JK5002
DVI AUDIO IN
DVI L
DVI R
TO H1
DG1
AUDIO L
AUDIO R
VAO MUTE
DVI Y
DVI PB
DVI PR
JPEG Y
JPEG C
SUB PB
SUB PR
SUB Y
MAIN PB
MAIN PR
MAIN Y
AFC1
AFC2
S3
V3
C3
R3
L3
Y3
IC5001
DVI RECIVER
RX0-
RX1-
RX2-
RX0+
RX1+
RX2+
RXC+
RXC-
SCL
SDA
RST
OUT
HSYNC
YSYNC
DE
IOR
IOG
IOB
IC5006
RESET
IC5005
FLIP FLOP
IC5007
INVERTER
IC5010
SYNC SELECT
VSYNC
IC5105
FLIP FLOP
IC5103
INVERTER
IC5104
EXCLUSIVE
OR GATE
IC5106
SYNC SW
IC5002
DDC EEPROM
WP
IC5004
PLL 3.3V
IC5011
AVR 3.3V
IC5012
AVR 3.3V
IC5102
RGB/YUV CONV.SW
RIN
GIN
BIN
SYNC
OPIN
VOUT
YOUT
UOUT
DVI PR
DVI Y
DVI PB
Q5001
Q5002
Q5003
Q5004
Q5005
Q5006
Q5101
Q5106
Q5103
Q5108
Q5102
Q5107
Q5104
Q5105
IC4517
AVR 3.3V
IC4516
AVR 2.5V
IC4518
MEMORY
64Mbit
SDRAM
IC4502
GC 2S+
SUB-PB
SUB-PR
SUB-Y
VIN1
VIN2
VIN3
A/D 8bit
60MHz
SYNC
SEPA
CLK
Detection
Sync
525i/p
625i/p
720p
1080i
Macrovision
SELF,ID,ED2
NOISE LEVEL
YUV
RGB
RGB →YUV
2D COM
CHROMA DEM.
COLOUR DETECT
I/F
H SCALEER
GAIN ADJ
NR/IP
MEMORY
CONTROL
MULTI
SUPER
PROGRESSIVE
IC4515
10bit A/D
VINT
AD MODE
Q4522
Q4526
Q4531
Q4533
Q4523
Q4527
Q4530
Q4524
Q4529
Q4532
Q4560
Q7
Q6
Q4559
Q4502
Q4505
Q4509
Q4512
Q4503
Q4506
Q4513
Q4510
Q4501
Q4508
Q4511
MAIN-PB
MAIN-PR
MAIN-Y
A/D 10bit
MATRIX
RGB →YUV
3D/2D com
VPK
SW
CHROMA DEM.
COLOUR DETECT.
I/F
TBC
NR FF
I/F
FF IP NR
JUST
PICTURE
IMPROVEMENT
RGB PROCESSOR
D/A 10bit ×3
D/A 10bit
110MHz ×3
D/A 8bit
×2
D/A OSD
CONT
RCF
GCF
BCF
AOUT3
AOUT4
AOUT5
RDV
BDV
CNT
R CUTOFF
G CUTOFF
B CUTOFF
IC4501
GC 2M+
CONTRAST
B DRIVE
R DRIVE
VPO3
HPO3
HFR
GC VP
GC HP
GC HFR
OSD YM
OSD YS
OSD R
OSD G
OSD B
YM
YS
OSD-BLUE
OSD-GREEN
OSD-RED
R-IN
G-IN
B-IN
INPUT
BRIGHT DET.
CONTRAST
CONT.
DRIVE
CONT.
IC4508
AVR 3.3V
IC4504
MEMORY
64Mbit SDRAM
IC4521
AVR 3.3V
IC4505
2.5V A/D
IC4503
AVR 3.3V
IC4522
2.5V D/A
IC4507
AVR 3.3V
IC4511
AVR 3.3V
IC4509
PLL 2.5V
5V
3.3V
2.5V
TO

TH-42PA20U DG-Board Block Diagram

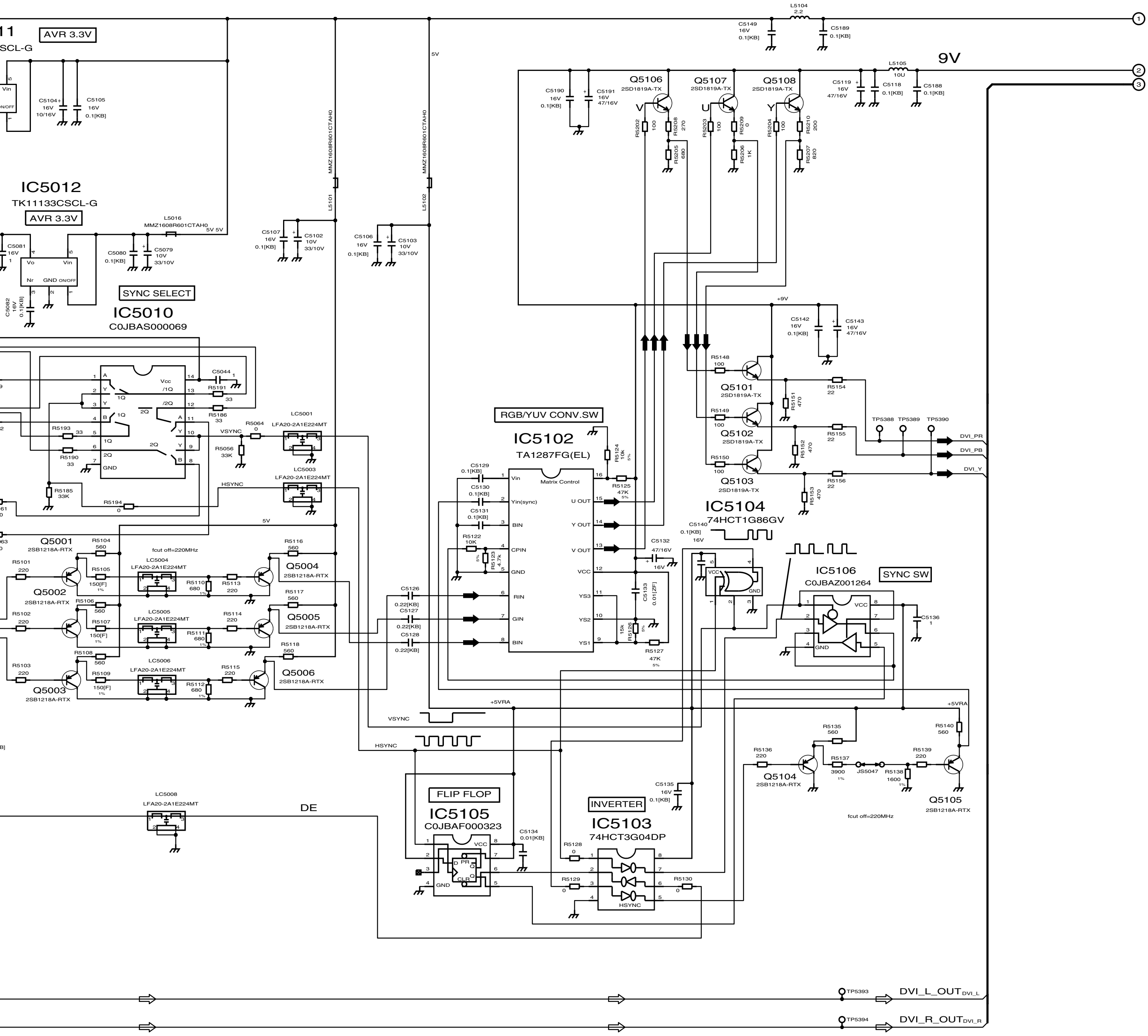

DG22
JPEG Y
JPEG C
P ON H
RST
/CS
DG21
READY
SCLK
SDI
SDO
TO PA6
DG6
LIN
RIN
SPMUTE
POFF DEF
MAIN DEF
SCL1
SDA1
RST
TO PA2
DG2
TVON
SOS2
ATSCONOFF
ACTVONOFF
PSTATUS
TVON OPT
AC TVON
Q3
JPEG Y
JPEG C
JPGINT
XRSTJPG
INT0JPG
INT1JPG
SBTJPG
SBIJPG
SB0JPG
AUDIO L
AUDIO R
HP DET
POFF DEF
MAIN DEF
SOS2
ATSC ON
AC TVON
IC8031
EX. I/O
SDA2
SCL2
DVI PR
DVI Y
DVI PB
IC003
RESET
OUT
TP5397
TP5399
TP5395
TP5396
TP5398
Q27
IC001
MICOM
GC VP
GC HP
GC HFR
AD MODE
SUB Y
MAIN Y
VIDEO MUTE
JPGINT
INT1JPG
INT0JPG
XRSTJPG
SB0JPG
SBIJPG
SBTJPG
AMUTE
AMUTE25
RESET
HP DET
KEYSCAN2
KEYSCAN1
AFC1
AFC2
TVON OPT
LED SOS
REMOTEBC
OSD YS
OSD YM
OSD R
OSD G
OSD B
FA1
SOS2
ATSC ON
AC TVON
G LED
R LED
CVBS2
CVBS1
HDMIINT
HDMIWP
SCLHDMI
SDAHDMI
CEC OUT
REMOTE BC
ATSCONOFF
SDA1
SCL1
3.3V
2.5V
SWGC PC
SWGC PC
DG8
TO PA8
SDA2
SCL2
SDA1
SCL1
FA1
LOADER IN SEL
TXD TU1
RXD TU1
AB SDA3
AB SCL3
FA1
LOADER
TXD TU1
RXD TU1
IC005
SWITCHING
Y
Y0
Y1
X
X0
X1
SCL2
SCL1
SDA2
SDA1
IC002
EEPROM
WP
SCL
SDA
IC3801
CONVERT MICON
TXD
RXD
SCL0
SDA0
RST
TXD TU0
TXD TU1
RXD TU0
RXD TU1
LOADER
IC3803
RESET
IC3802
SWITCHING
IC3003
I/O PORT
IC3517
SWITCHING
SCL3
SDA3
IC004
REG 3.3V
5V
3.3V
Q2254
Q2253
Q2252
Q2255
Q2251
Q2258
AMUTE25
MAIN DEF
VAO MUTE
AUDIO MUTE
POFF DEF
DG12
TO K12
R LED
G LED
KEYSCAN1
KEY1
IC3004
SLOT DETECTION DAC
IC3699
EEPROM
SRQ
IC4515
10bit A/D
VINT
AD MODE
DG41
REMOTE BC
OSD YM
IC4519
OR GATE
OSD YS
IC4520
OR GATE
A
OUT
IC8071
SYNC INPUT SELECT
GC HD
PC HD
GC VD
PC VD
IC8009
SWITCHING
IC8076
BUFFER
GC HP
GC VP
I2
I3
I1
I6
I4
O2
O3
O1
O5
O4
O6
I5
GC HD
GC VD
VD S
HD S
IC8054
SYNC SEPARATION
HIN
VIN
GIN
HD-
VD+
CLP
IC8008
G-IN SELECT
I0
I1
SEL
COM
Q8015
DG3
TO D3
VD S
HD S
REMOTEBC
Q20
Q21
REMOTE OUT
R
B
G
LED SOS
LEDCTRL SOS
PSTATUS
POWER STATUS
TXD TU0
RXD TU0
SW CLP
NCLP
OSD YM
OSD YS
OSD R
OSD G
OSD B
YM
YS
OSD-BLUE
OSD-GREEN
OSD-RED
R-IN
INPUT
RIGHT DET.
G-IN
B-IN
R-OUT
G-OUT
B-OUT
Q4554
Q4557
Q4555
Q4558
Q4553
Q4556
IC8200
RGB SELECT
PC R
PC G
PC B
IN1A
IN1B
IN2A
IN2B
IN3A
IN3B
OUT1
OUT2
OUT3
IC8201
RGB LPF
RINA
GINA
BINA
ROUT
GOUT
BOUT
IC8030
TEST SW
RIN
GIN
BIN
TESTSW
IC4513
AD 2.5V
2.5V
IC4514
AVR 3.3V
3.3V
CONTRAST CONT.
DRIVE CONT.
CUT OFF CONT.
CNT
BDV
RDV
CONTRAST
B DRIVE
R DRIVE
IC4512
RGB AMP
HP S
DG7
TO G7
S3
Y3
C3
V3
L3
R3
SW
Y
C
V
SL
SR
KEYSCAN2
KEYSCAN1
HP DET
PC HD
PC VD
DG18
TO G18
PC B
PC G
PC R
DG30
HP
AFC1
AFC2

TH-42PA20U DG-Board Block Diagram

14.15. DG-Board (1 of 8) Schematic Diagram


DG-BOARD TNPA2816 (1/8)
DVI-IN
JK5001
IC5004
TK11133CSCL-G
C0CBCBD00008
PLL_3.3V
IC5011
TK11133CSCL-G
AVR 3.3V
IC5012
TK11133CSCL-G
AVR 3.3V
IC5005
C0JBAF000184
FLIP FLOP
1Q/2Q H at POSITIVE
IC5007
74HCT3G04DP
INVERTER
IC5001
SiI907BCQG52/TR
DVI RECIVER
Q5007
NDC7002N
Level-Shifting
Q5001
Q5002
Q5003
2SB1218A-RTX
IC5006
PST9128NR
RESET
IC5002
DDC EEPROM
CAT24WC02WI-TE13
WP
DDC_SCL
DDC_SDA
DDC_WP
DVI AUDIO-IN
JK5002
LPV1520-0410F
D5003
SRV05-4
D5002
SRV05-4
D5001
SRV05-4
D5004
SRV05-4
D5011
MAZ30360HL
D9028
MAZ30560ML
D5101
MAZ30560ML
LC5002
LFA20-2A1E224MT
A
B
C
D
E
F
1
2
3
4
5

TH-42PA20U
DG-Board(1of8)Schematic Diagram

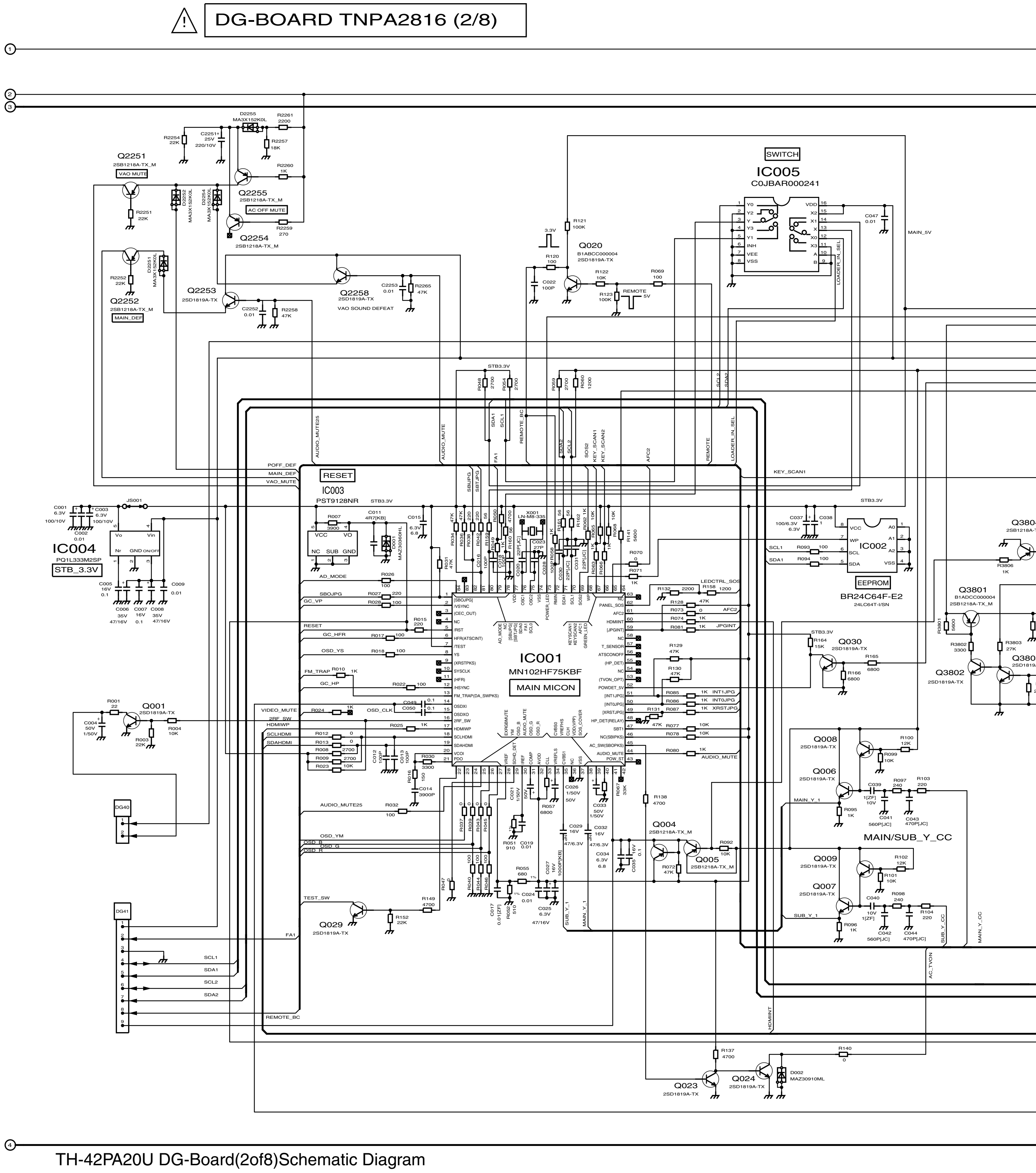


AVR 3.3V
SCL-G
IC5012
TK11133CSCL-G
AVR 3.3V
L5016
MMZ1608R601CTAH0
SYNC SELECT
IC5010
C0JBAS000069
LC5001
LFA20-2A1E224MT
LC5003
LFA20-2A1E224MT
VSYNC
HSYNC
Q5001
2SB1218A-RTX
Q5002
2SB1218A-RTX
Q5003
2SB1218A-RTX
Q5004
2SB1218A-RTX
Q5005
2SB1218A-RTX
Q5006
2SB1218A-RTX
fcut off=220MHz
LC5004
LFA20-2A1E224MT
LC5005
LFA20-2A1E224MT
LC5006
LFA20-2A1E224MT
LC5008
LFA20-2A1E224MT
DE
L5101
MMZ1608R601CTAH0
L5102
MMZ1608R601CTAH0
5V
L5104
2.2
9V
L5105
10U
Q5106
2SD1819A-TX
Q5107
2SD1819A-TX
Q5108
2SD1819A-TX
V
U
Y
+9V
Q5101
2SD1819A-TX
Q5102
2SD1819A-TX
Q5103
2SD1819A-TX
TP5388
TP5389
TP5390
DVI_PR
DVI_PB
DVI_Y
RGB/YUV CONV.SW
IC5102
TA1287FG(EL)
Matrix Control
Vin
Yin(sync)
BIN
CPIN
GND
RIN
GIN
U OUT
Y OUT
V OUT
VCC
YS3
YS2
YS1
IC5104
74HCT1G86GV
IC5106
C0JBAZ001264
SYNC SW
+5VRA
VSYNC
HSYNC
FLIP FLOP
IC5105
C0JBAF000323
INVERTER
IC5103
74HCT3G04DP
Q5104
2SB1218A-RTX
Q5105
2SB1218A-RTX
JS5047
fcut off=220MHz
TP5393
DVI_L_OUT
TP5394
DVI_R_OUT
①
②
③
④

TH-42PA20U DG-Board(1of8)Schematic Diagram

5 6 7 8 9

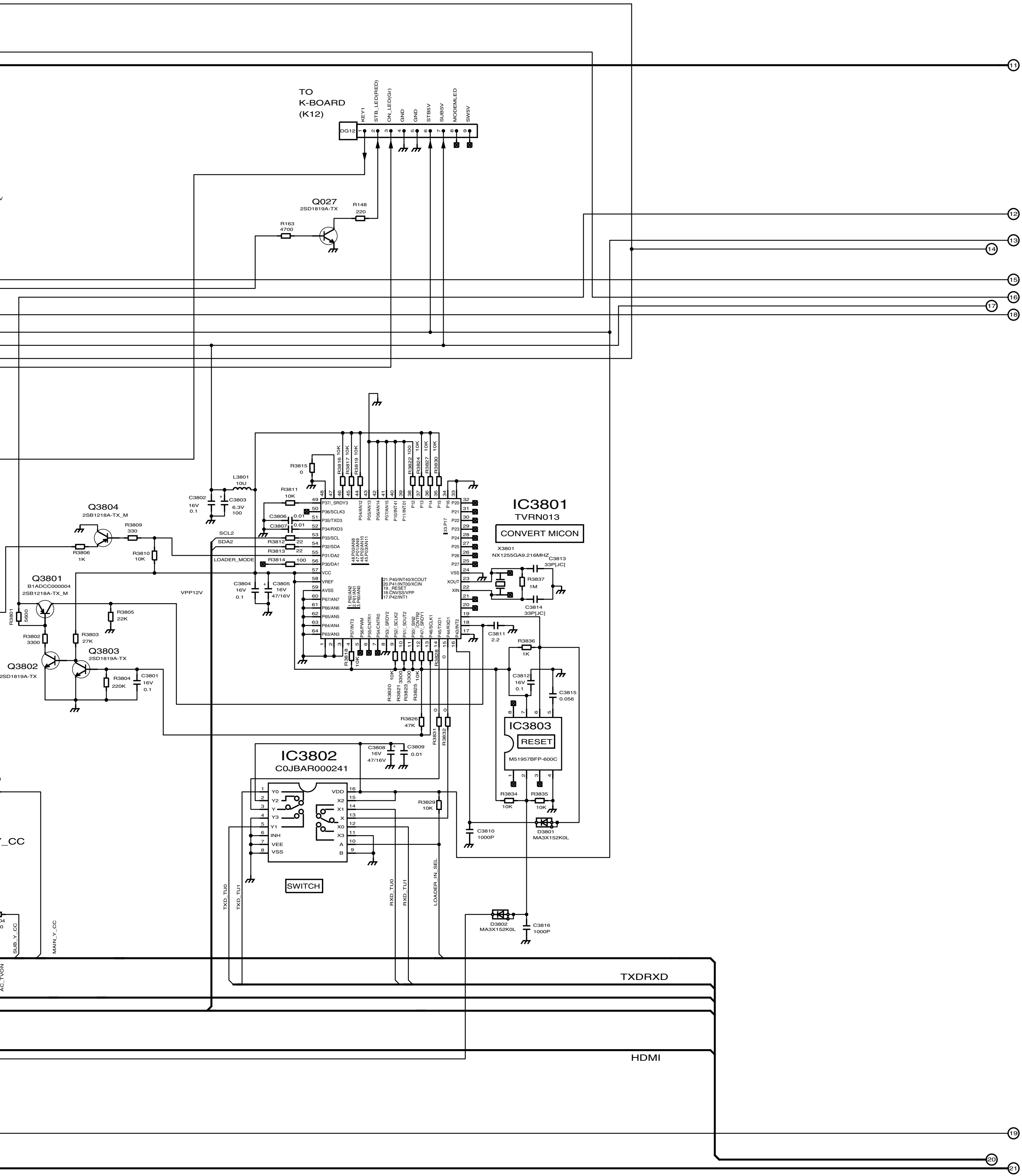
14.16. DG-Board (2 of 8) Schematic Diagram



DG-BOARD TNPA2816 (2/8)
Q2251
2SB1218A-TX_M
VAO MUTE
Q2255
2SB1218A-TX_M
AC OFF MUTE
Q2254
2SB1218A-TX_M
Q2252
2SB1218A-TX_M
MAIN_DEF
Q2253
2SD1819A-TX
Q2258
2SD1819A-TX
VAO SOUND DEFEAT
D2255
MA3X152K0L
Q020
B1ABCC000004
2SD1819A-TX
SWITCH
IC005
C0JBAR000241
MAIN_5V
LOADER_IN_SEL
REMOTE
STB3.3V
RESET
IC003
PST9128NR
IC004
PQ1L333M2SP
STB_3.3V
IC001
MN102HF75KBF
MAIN MICON
X001
LN-M8-335
IC002
BR24C64F-E2
24LC64T-I/SN
EEPROM
Q3801
B1ADCC000004
2SB1218A-TX_M
Q3802
2SD1819A-TX
Q030
2SD1819A-TX
Q001
2SD1819A-TX
Q008
2SD1819A-TX
Q006
2SD1819A-TX
Q009
2SD1819A-TX
Q007
2SD1819A-TX
MAIN/SUB_Y_CC
Q004
2SB1218A-TX_M
Q005
2SB1218A-TX_M
Q029
2SD1819A-TX
Q023
2SD1819A-TX
Q024
2SD1819A-TX
D002
MAZ30910ML
DG40
DG41
SCL1
SDA1
SCL2
SDA2
REMOTE_BC
FA1
KEY_SCAN1
AC_TVON
HDMIINT

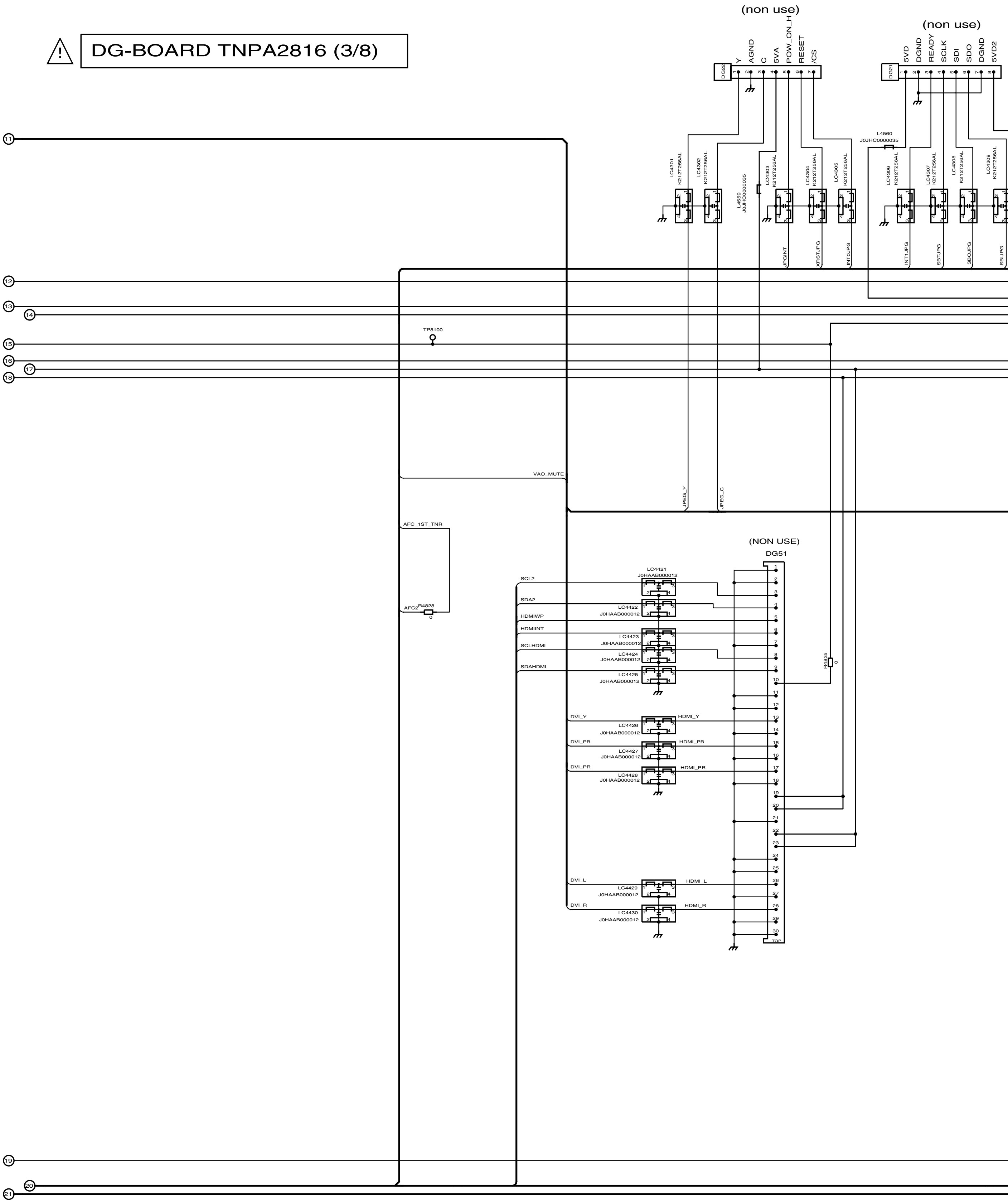
TH-42PA20U DG-Board(2of8)Schematic Diagram

10 11 12 13 14


TO
K-BOARD
(K12)
DG12
KEY1
STB_LED(RED)
ON_LED(Gr)
GND
GND
STB5V
SUB5V
MODEMLED
SW5V
Q027
2SD1819A-TX
R148
220
R163
4700
IC3801
TVRN013
CONVERT MICON
X3801
NX1255GA9.216MHZ
C3813
33P[JC]
R3837
1M
C3814
33P[JC]
C3811
2.2
R3836
1K
C3812
16V
0.1
C3815
0.056
IC3803
RESET
M51957BFP-600C
R3834
10K
R3835
10K
D3801
MA3X152K0L
C3810
1000P
D3802
MA3X152K0L
C3816
1000P
IC3802
C0JBAR000241
SWITCH
C3808
16V
47/16V
C3809
0.01
R3829
10K
R3826
47K
R3831
R3832
Q3804
2SB1218A-TX_M
R3809
330
R3806
1K
R3810
10K
Q3801
B1ADCC000004
2SB1218A-TX_M
R3801
5600
R3802
3300
R3803
27K
R3805
22K
Q3803
2SD1819A-TX
Q3802
2SD1819A-TX
R3804
220K
C3801
16V
0.1
L3801
10U
C3802
16V
0.1
C3803
6.3V
100
C3804
16V
0.1
C3805
16V
47/16V
R3811
10K
R3815
0
C3806
0.01
C3807
0.01
R3812
22
R3813
22
R3814
100
SCL2
SDA2
LOADER_MODE
VPP12V
R3816 10K
R3817 10K
R3819 10K
R3822 100
R3824 10K
R3827 10K
R3830 10K
R3818 10K
R3820 10K
R3821 3300
R3823 3300
R3825 10K
R3828 10K
TXD_TU0
TXD_TU1
RXD_TU0
RXD_TU1
LOADER_IN_SEL
SUB_Y_CC
MAIN_Y_CC
AC_TVON
_CC
TXDRXD
HDMI
11
12
13
14
15
16
17
18
19
20
21
14
15
16
17
18

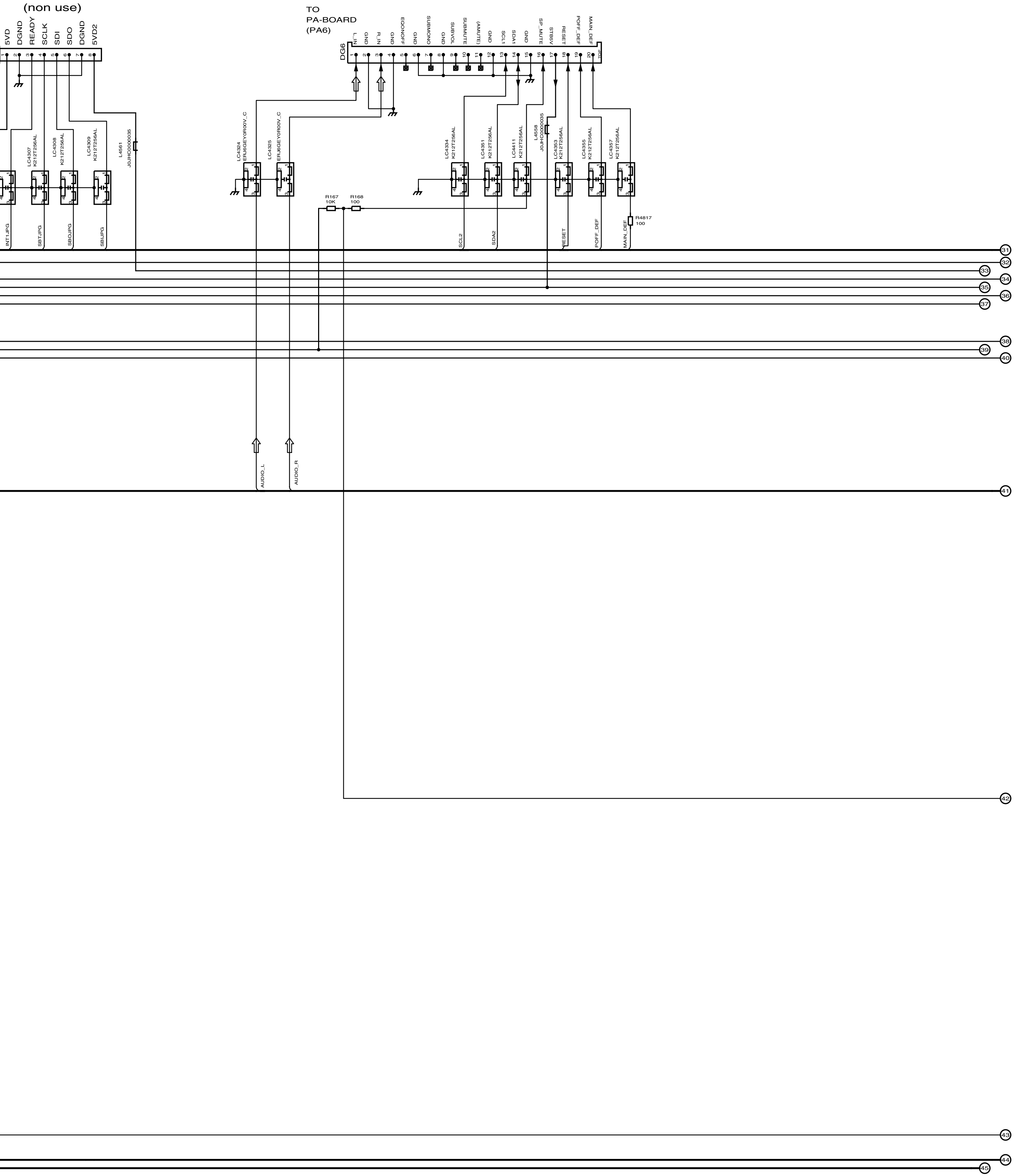
TH-42PA20U DG-Board(2of8)Schematic Diagram

14.17. DG-Board (3 of 8) Schematic Diagram


DG-BOARD TNPA2816 (3/8)
(non use)
DG22
Y
AGND
C
5VA
POW_ON_H
RESET
/CS
(non use)
DG21
5VD
DGND
READY
SCLK
SDI
SDO
DGND
5VD2
L4560
J0JHC0000035
L4559
J0JHC0000035
LC4301
K212T256AL
LC4302
K212T256AL
LC4303
K212T256AL
LC4304
K212T256AL
LC4305
K212T256AL
LC4306
K212T256AL
LC4307
K212T256AL
LC4308
K212T256AL
LC4309
K212T256AL
JPGINT
XRSTJPG
INT0JPG
INT1JPG
SBTJPG
SBOJPG
SBIJPG
TP8100
VAO_MUTE
JPEG_Y
JPEG_C
AFC_1ST_TNR
AFC2
R4828
0
(NON USE)
DG51
SCL2
SDA2
HDMIWP
HDMIINT
SCLHDMI
SDAHDMI
LC4421
J0HAAB000012
LC4422
J0HAAB000012
LC4423
J0HAAB000012
LC4424
J0HAAB000012
LC4425
J0HAAB000012
R4835
0
DVI_Y
HDMI_Y
LC4426
J0HAAB000012
DVI_PB
HDMI_PB
LC4427
J0HAAB000012
DVI_PR
HDMI_PR
LC4428
J0HAAB000012
DVI_L
HDMI_L
LC4429
J0HAAB000012
DVI_R
HDMI_R
LC4430
J0HAAB000012
TOP
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑

TH-42PA20U DG-Board(3of8)Schematic Diagram

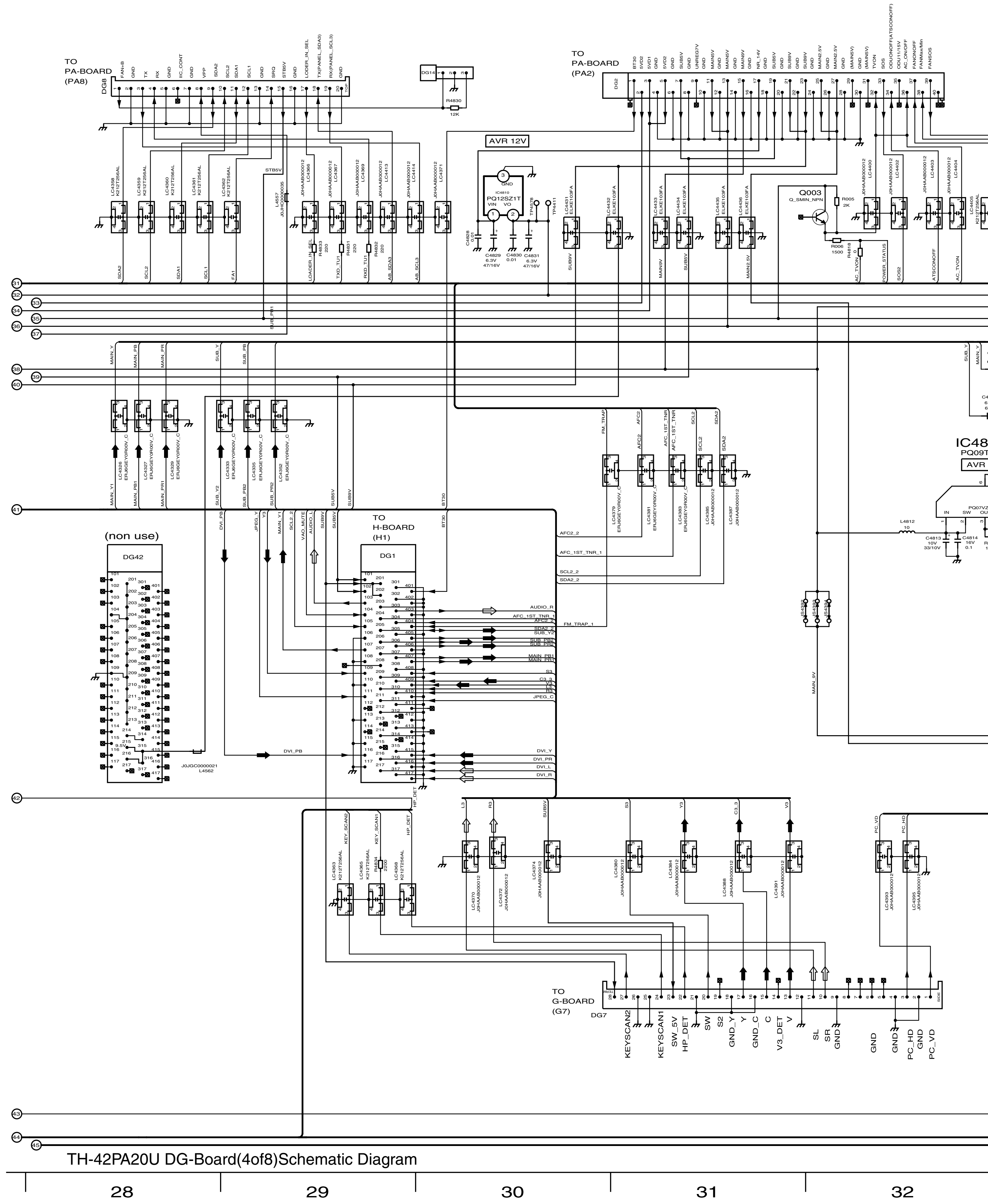
19
20
21
22
23


(non use)
5VD
DGND
READY
SCLK
SDI
SDO
DGND
5VD2
1
2
3
4
5
6
7
8
LC4307
K212T256AL
LC4308
K212T256AL
LC4309
K212T256AL
L4561
J0JHC0000035
INT1JPG
SBTJPG
SBOJPG
SBIJPG
TO
PA-BOARD
(PA6)
DG6
L_IN
GND
R_IN
GND
EQONOFF
GND
SUBMONO
GND
SUBVOL
SUBMUTE
(AMUTE)
GND
SCL1
SDA1
GND
SP_MUTE
STB5V
RESET
POFF_DEF
MAIN_DEF
TOP
LC4324
ERJ6GEY0R00V_C
LC4325
ERJ6GEY0R00V_C
R167
10K
R168
100
LC4334
K212T256AL
LC4351
K212T256AL
LC4411
K212T256AL
L4558
J0JHC0000035
LC4353
K212T256AL
LC4355
K212T256AL
LC4357
K212T256AL
R4817
100
SCL2
SDA2
RESET
POFF_DEF
MAIN_DEF
AUDIO_L
AUDIO_R
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45

TH-42PA20U DG-Board(3of8)Schematic Diagram

23 24 25 26 27

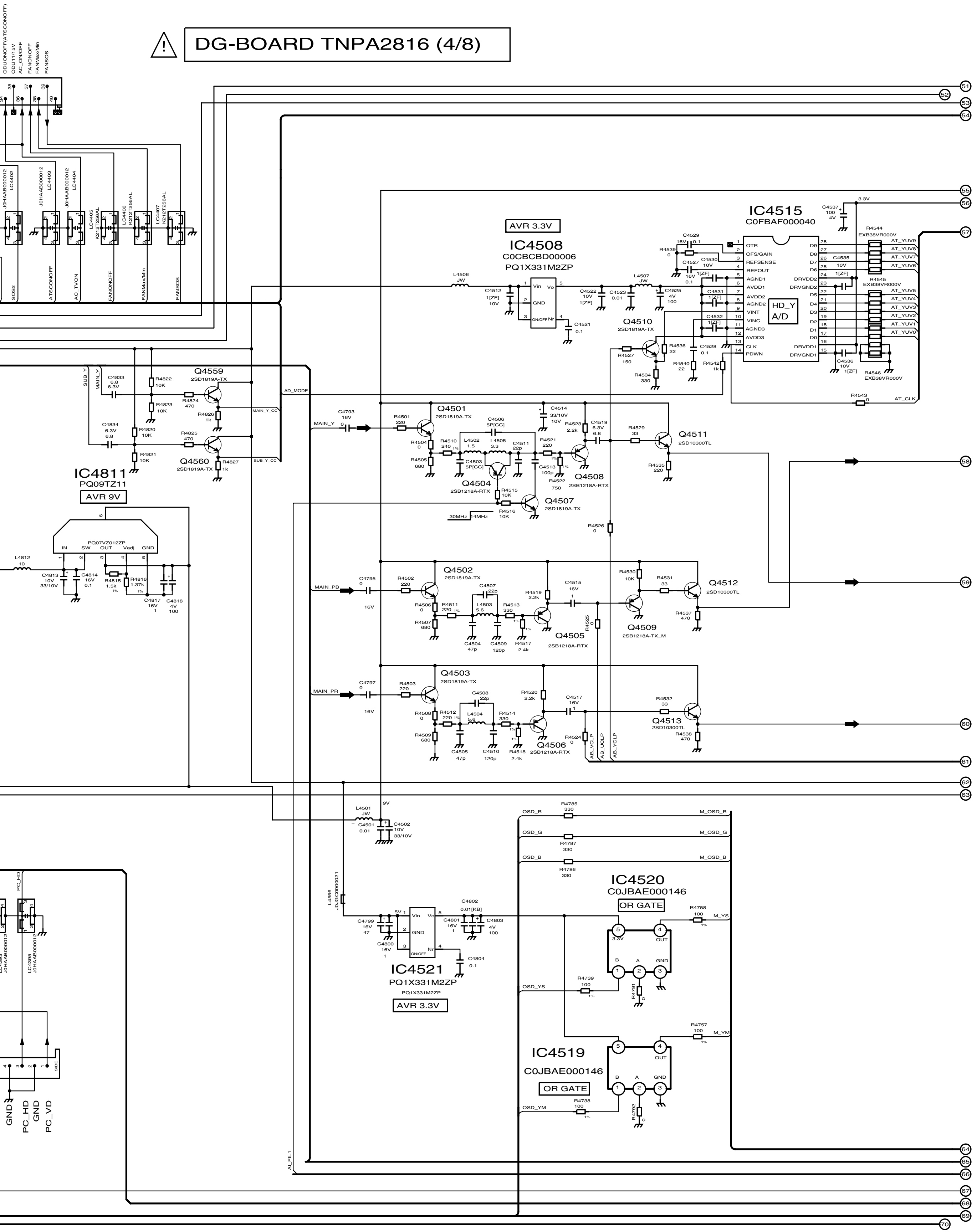
14.18. DG-Board (4 of 8) Schematic Diagram



TO PA-BOARD (PA8)
DG8
FAN-B
GND
TX
RX
IIC_CONT
VPP
SDA2
SCL2
SDA1
SCL1
SRQ
STB5V
LODER_IN_SEL
TX(PANEL_SDA3)
RX(PANEL_SCL3)
DG14
R4830
12K
AVR 12V
IC4810
PQ12SZ1T
VIN
VO
GND
C4828
0.01
C4829
6.3V
47/16V
C4830
0.01
C4831
6.3V
47/16V
TP4578
TP4411
TO PA-BOARD (PA2)
DG2
BT30
5VD2
5VD1
GND
SUB5V
UNREG7V
MAIN5V
MAIN9V
NR_14V
SUB9V
MAIN2.5V
(MAIN5V)
TVON
SOS
ODU(ONOFF/ATSCONOFF)
ODU11/15V
AC_ON/OFF
FANONOFF
FANMax/Min
FANSOS
Q003
Q_SMIN_NPN
R005
2K
R006
1500
R4818
0
AC_TVON
POWER_STATUS
SOS2
ATSCONOFF
STB5V
SDA2
SCL2
SDA1
SCL1
FA1
LOADER_IN_SEL
TXD_TU1
RXD_TU1
AB_SDA3
AB_SCL3
SUB9V
MAIN9V
SUB5V
MAIN2.5V
SUB_PR1
MAIN_Y
MAIN_PB
MAIN_PR
SUB_Y
SUB_PB
MAIN_Y1
MAIN_PB1
MAIN_PR1
SUB_Y2
SUB_PB2
SUB_PR2
FM_TRAP
AFC2
AFC_1ST_TNR
SCL2
SDA2
IC48
PQ09T
AVR
PQ07VZ
IN
SW
L4812
10
C4813
10V
33/10V
C4814
16V
0.1
(non use)
DG42
J0JGC0000021
L4562
TO H-BOARD (H1)
DG1
DVI_PB
JPEG_Y
Y3
MAIN_Y1
SCL2_2
VAO_MUTE
AUDIO_L
SUB9V
SUB5V
BT30
AFC2_2
AFC_1ST_TNR_1
SCL2_2
SDA2_2
AUDIO_R
AFC_1ST_TNR_1
AFC2_2
SDA2_2
SUB_Y2
SUB_PB2
SUB_PR2
MAIN_PB1
MAIN_PR1
S3
C3_3
JPEG_C
FM_TRAP_1
DVI_Y
DVI_PR
DVI_L
DVI_R
HP_DET
KEY_SCAN2
KEY_SCAN1
R4834
2200
MAIN_9V
L3
R3
SUB5V
S3
Y3
C3_3
V3
PC_VD
PC_HD
TO G-BOARD (G7)
DG7
KEYSCAN2
KEYSCAN1
SW_5V
HP_DET
SW
S2
GND_Y
Y
GND_C
C
V3_DET
V
SL
SR
GND
GND
GND
PC_HD
GND
PC_VD
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
28
29
30
31
32

TH-42PA20U DG-Board(4of8)Schematic Diagram

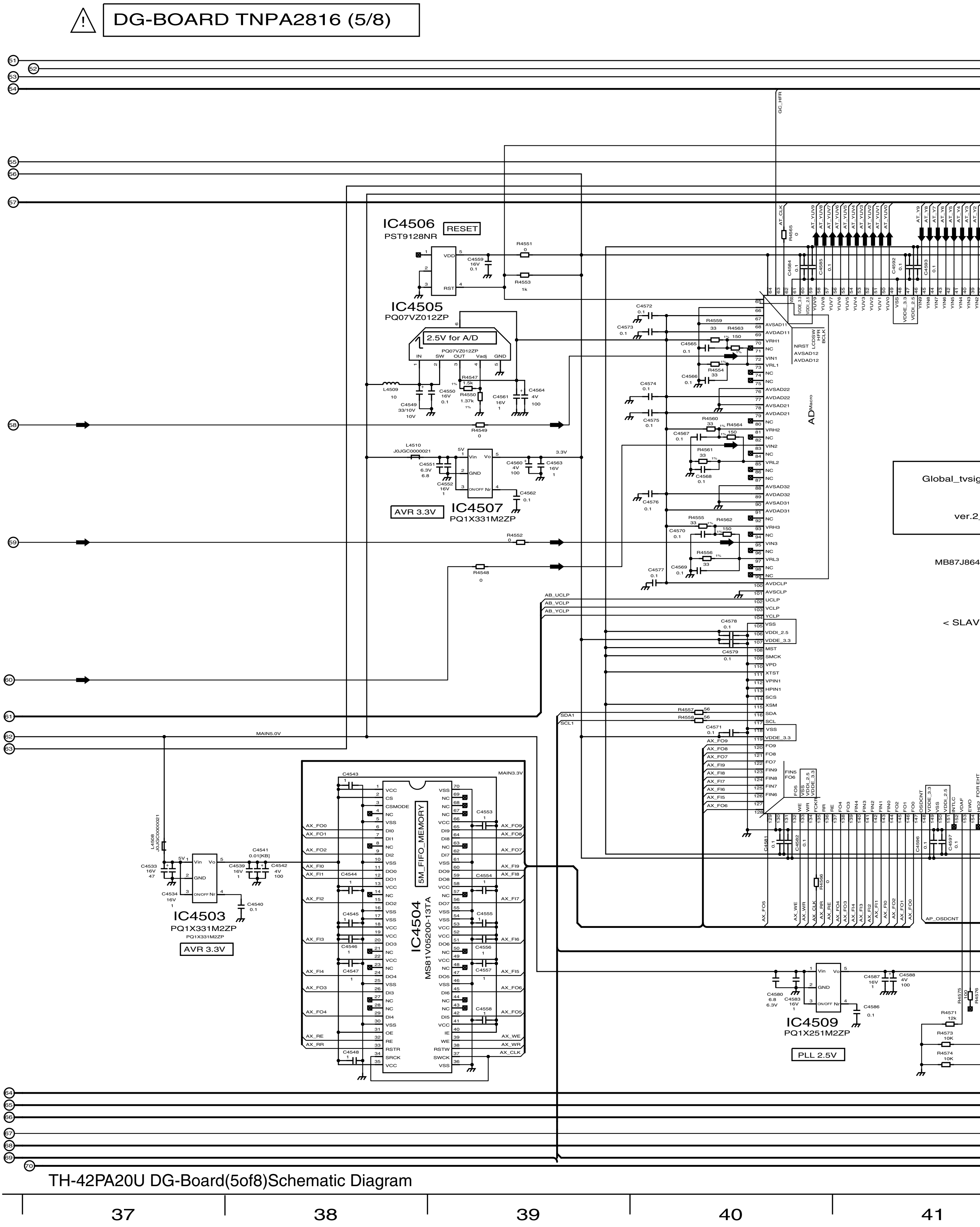
DG-BOARD TNPA2816 (4/8)


IC4515
C0FBAF000040
HD_Y
A/D
IC4508
C0CBCBD00006
PQ1X331M2ZP
AVR 3.3V
IC4811
PQ09TZ11
AVR 9V
PQ07VZ012ZP
Q4559
Q4560
Q4501
Q4502
Q4503
Q4504
Q4505
Q4506
Q4507
Q4508
Q4509
Q4510
Q4511
Q4512
Q4513
2SD1819A-TX
2SB1218A-RTX
2SD10300TL
MAIN_Y
MAIN_PB
MAIN_PR
SUB_Y
AD_MODE
MAIN_Y_CC
SUB_Y_CC
AT_YUV9
AT_YUV8
AT_YUV7
AT_YUV6
AT_YUV5
AT_YUV4
AT_YUV3
AT_YUV2
AT_YUV1
AT_YUV0
AT_CLK
EXB38VR000V
30MHz
14MHz
AB_VCLP
AB_UCLP
AB_YCLP
IC4520
C0JBAE000146
OR GATE
IC4519
C0JBAE000146
OR GATE
IC4521
PQ1X331M2ZP
AVR 3.3V
OSD_R
OSD_G
OSD_B
OSD_YS
OSD_YM
M_OSD_R
M_OSD_G
M_OSD_B
M_YS
M_YM
AI_FIL1
GND
PC_HD
GND
PC_VD
ODUONOFF(ATSCONOFF)
ODU11/15V
AC_ON/OFF
FANONOFF
FANMax/Min
FANSOS
ATSCONOFF
AC_TVON
FANONOFF
FANMax/Min
FANSOS
(51)
(52)
(53)
(54)
(55)
(56)
(57)
(58)
(59)
(60)
(61)
(62)
(63)
(64)
(65)
(66)
(67)
(68)
(69)
(70)

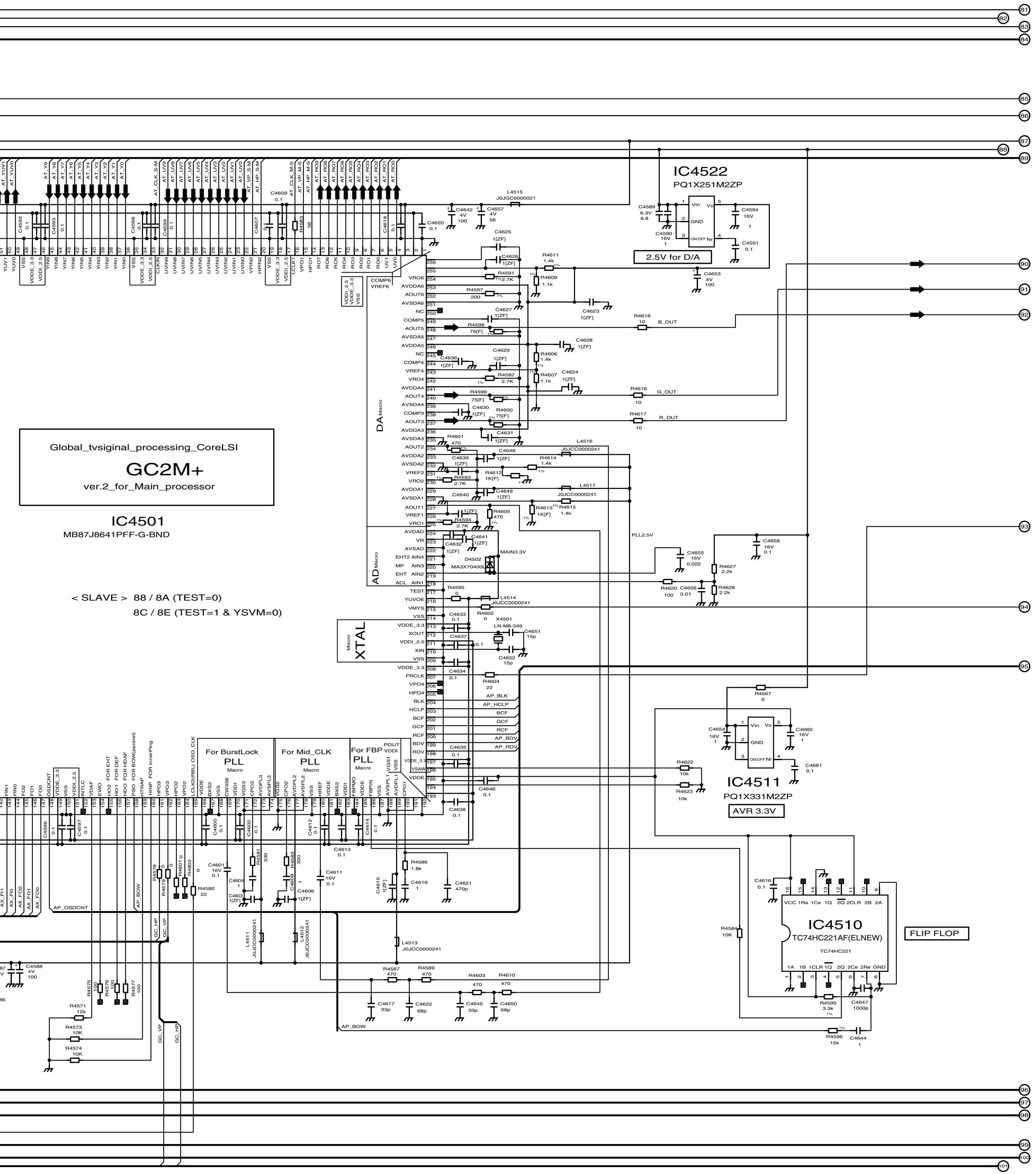
TH-42PA20U DG-Board(4of8)Schematic Diagram

32 33 34 35 36

14.19. DG-Board (5 of 8) Schematic Diagram


DG-BOARD TNPA2816 (5/8)
IC4506
PST9128NR
RESET
IC4505
PQ07VZ012ZP
2.5V for A/D
IC4507
PQ1X331M2ZP
AVR 3.3V
IC4503
PQ1X331M2ZP
AVR 3.3V
IC4504
MS81V05200-13TA
5M_FIFO_MEMORY
IC4509
PQ1X251M2ZP
PLL 2.5V
MAIN5.0V
MAIN3.3V
AB_UCLP
AB_VCLP
AB_YCLP
SDA1
SCL1
GC_HFR
ADMacro
Global_tvsig
ver.2
MB87J864
< SLAV
37
38
39
40
41

TH-42PA20U DG-Board(5of8)Schematic Diagram



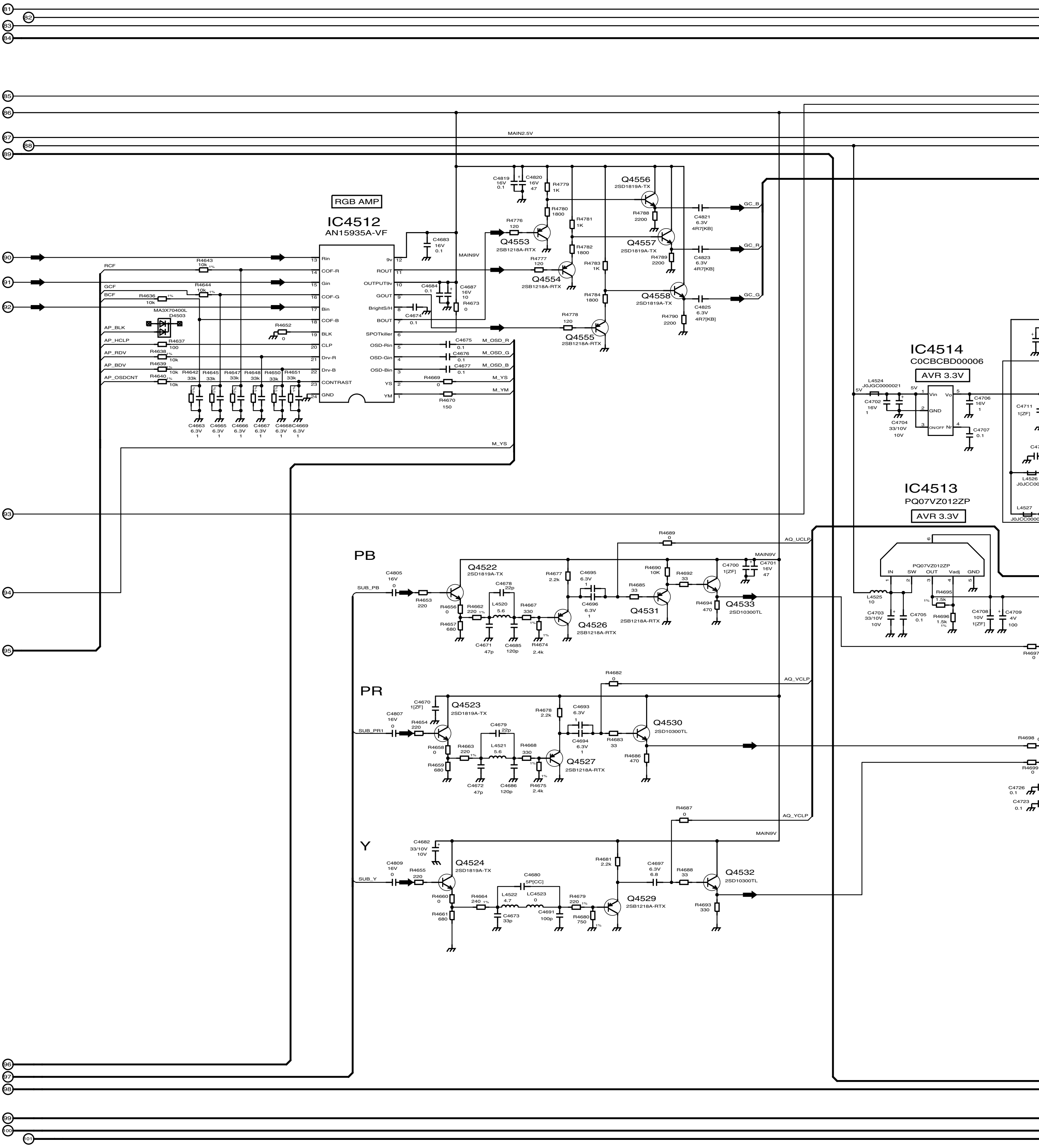
IC4522
PQ1X251M2ZP
Vin
Vo
GND
ON/OFF Nr
2.5V for D/A
Global_tvsiginal_processing_CoreLSI
GC2M+
ver.2_for_Main_processor
IC4501
MB87J8641PFF-G-BND
< SLAVE > 88 / 8A (TEST=0)
8C / 8E (TEST=1 & YSVM=0)
DA Macro
AD Macro
XTAL Macro
For BurstLock PLL Macro
For Mid_CLK PLL Macro
For FBP PLL Macro
B_OUT
G_OUT
R_OUT
PLL2.5V
MAIN3.3V
D4502 MA3X704000L
X4501 LN-M8-349
L4515 J0JGC0000021
L4516 J0JCC0000241
L4517 J0JCC0000241
L4514 J0JCC0000241
L4513 J0JCC0000241
L4511 J0JCC0000241
L4512 J0JCC0000241
IC4511
PQ1X331M2ZP
AVR 3.3V
IC4510
TC74HC221AF(ELNEW)
TC74HC221
FLIP FLOP
VCC 1Re 1Ce 1Q 2Q 2CLR 2B 2A
1A 1B 1CLR 1Q 2Q 2Ce 2Re GND
AP_BLK
AP_HCLP
BCF
GCF
RCF
AP_BDV
AP_RDV
AP_BOW
AP_OSDCNT
GC_HP
GC_VP
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101

TH-42PA20U DG-Board(5of8)Schematic Diagram

41 42 43 44 45

14.20. DG-Board (6 of 8) Schematic Diagram

DG-BOARD TNPA2816 (6/8)



RGB AMP
IC4512
AN15935A-VF
Rin
COF-R
Gin
COF-G
Bin
COF-B
BLK
CLP
Drv-R
Drv-B
CONTRAST
GND
9v
ROUT
OUTPUT9v
GOUT
BrightS/H
BOUT
SPOTkiller
OSD-Rin
OSD-Gin
OSD-Bin
YS
YM
RCF
GCF
BCF
AP_BLK
AP_HCLP
AP_RDV
AP_BDV
AP_OSDCNT
MA3X70400L
D4503
M_OSD_R
M_OSD_G
M_OSD_B
M_YS
M_YM
MAIN2.5V
MAIN9V
Q4553
2SB1218A-RTX
Q4554
2SB1218A-RTX
Q4555
2SB1218A-RTX
Q4556
2SD1819A-TX
Q4557
2SD1819A-TX
Q4558
2SD1819A-TX
GC_B
GC_R
GC_G
IC4514
C0CBCBD00006
AVR 3.3V
Vin
Vo
GND
ON/OFF
Nr
IC4513
PQ07VZ012ZP
AVR 3.3V
PQ07VZ012ZP
IN
SW
OUT
Vadj
GND
PB
SUB_PB
Q4522
2SD1819A-TX
Q4526
2SB1218A-RTX
Q4531
2SB1218A-RTX
Q4533
2SD10300TL
AQ_UCLP
PR
SUB_PR1
Q4523
2SD1819A-TX
Q4527
2SB1218A-RTX
Q4530
2SD10300TL
AQ_VCLP
Y
SUB_Y
Q4524
2SD1819A-TX
Q4529
2SB1218A-RTX
Q4532
2SD10300TL
AQ_YCLP
L4520
L4521
L4522
LC4523
L4524
L4525
L4526
L4527
81
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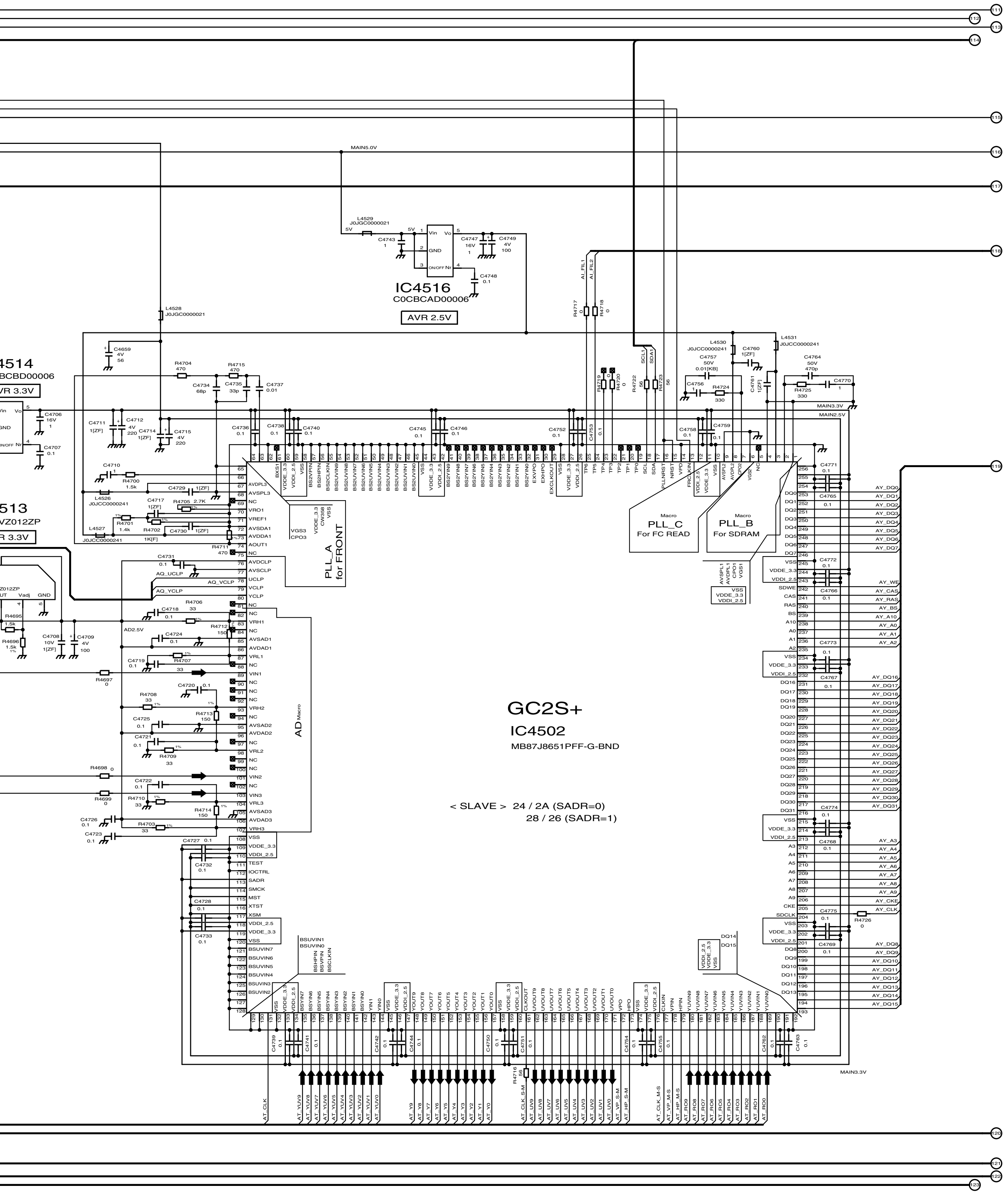
98
99
100
101

TH-42PA20U DG-Board(6of8)Schematic Diagram

46 47 48 49 50


GC2S+
IC4502
MB87J8651PFF-G-BND
< SLAVE > 24 / 2A (SADR=0)
28 / 26 (SADR=1)
IC4516
C0CBCAD00006
AVR 2.5V
4514
BCBD00006
VR 3.3V
513
VZ012ZP
R 3.3V
PLL_A
for FRONT
PLL_C
For FC READ
PLL_B
For SDRAM
Macro
AD Macro
MAIN5.0V
MAIN3.3V
MAIN2.5V
L4528
J0JGC0000021
L4529
J0JGC0000021
L4530
J0JCC0000241
L4531
J0JCC0000241
L4526
J0JCC0000241
L4527
J0JCC0000241
AI_FIL1
AI_FIL2
AQ_UCLP
AQ_VCLP
AQ_YCLP
AD2.5V
AT_CLK
AT_YUV9
AT_YUV8
AT_YUV7
AT_YUV6
AT_YUV5
AT_YUV4
AT_YUV3
AT_YUV2
AT_YUV1
AT_YUV0
AT_Y9
AT_Y8
AT_Y7
AT_Y6
AT_Y5
AT_Y4
AT_Y3
AT_Y2
AT_Y1
AT_Y0
AT_CLK_S-M
AT_UV9
AT_UV8
AT_UV7
AT_UV6
AT_UV5
AT_UV4
AT_UV3
AT_UV2
AT_UV1
AT_UV0
AT_VP_S-M
AT_HP_S-M
AT_CLK_M-S
AT_VP_M-S
AT_HP_M-S
AT_RO9
AT_RO8
AT_RO7
AT_RO6
AT_RO5
AT_RO4
AT_RO3
AT_RO2
AT_RO1
AT_RO0
AY_DQ0
AY_DQ1
AY_DQ2
AY_DQ3
AY_DQ4
AY_DQ5
AY_DQ6
AY_DQ7
AY_WE
AY_CAS
AY_RAS
AY_BS
AY_A10
AY_A0
AY_A1
AY_A2
AY_DQ16
AY_DQ17
AY_DQ18
AY_DQ19
AY_DQ20
AY_DQ21
AY_DQ22
AY_DQ23
AY_DQ24
AY_DQ25
AY_DQ26
AY_DQ27
AY_DQ28
AY_DQ29
AY_DQ30
AY_DQ31
AY_A3
AY_A4
AY_A5
AY_A6
AY_A7
AY_A8
AY_A9
AY_CKE
AY_CLK
AY_DQ8
AY_DQ9
AY_DQ10
AY_DQ11
AY_DQ12
AY_DQ13
AY_DQ14
AY_DQ15
111
112
113
114
115
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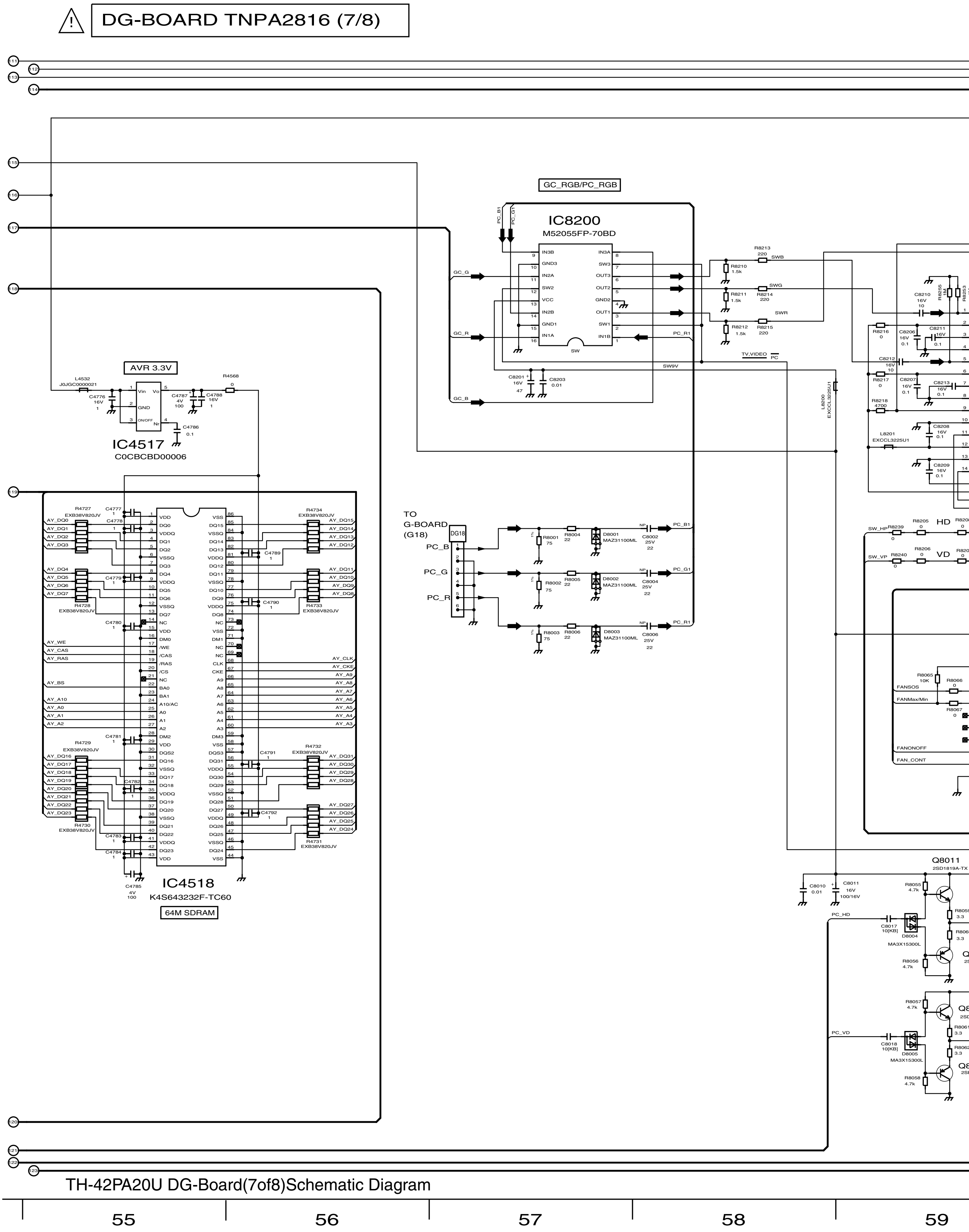
123

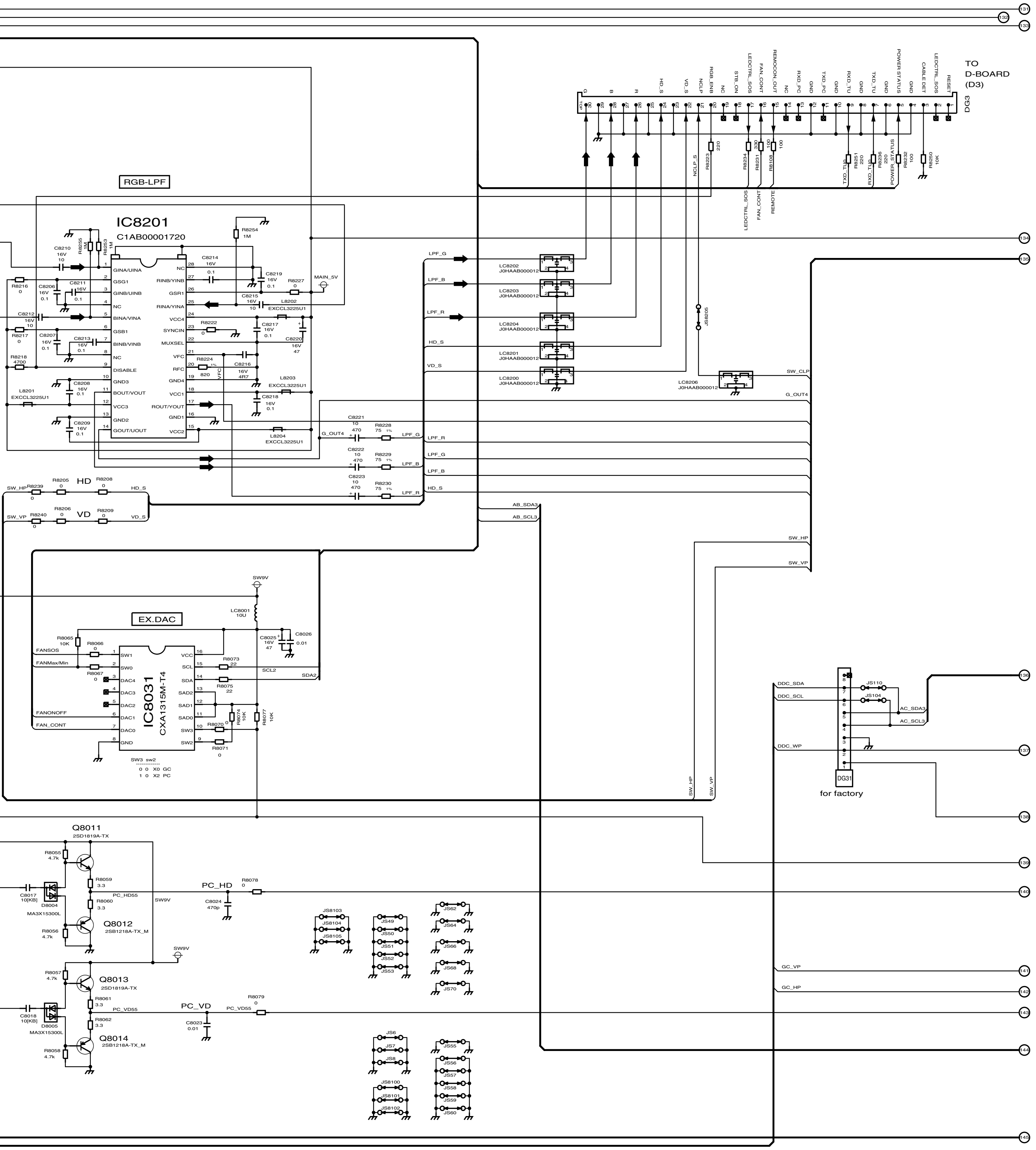
TH-42PA20U DG-Board(6of8)Schematic Diagram

50 51 52 53 54

14.21. DG-Board (7 of 8) Schematic Diagram


DG-BOARD TNPA2816 (7/8)
AVR 3.3V
L4532
J0JGC0000021
C4776
16V
1
C4787
4V
100
C4788
16V
1
R4568
0
C4786
0.1
Vin
Vo
GND
ON/OFF
Nr
IC4517
C0CBCBD00006
R4727
EXB38V820JV
C4777
C4778
R4734
EXB38V820JV
AY_DQ0
AY_DQ1
AY_DQ2
AY_DQ3
AY_DQ4
AY_DQ5
AY_DQ6
AY_DQ7
AY_DQ8
AY_DQ9
AY_DQ10
AY_DQ11
AY_DQ12
AY_DQ13
AY_DQ14
AY_DQ15
R4728
EXB38V820JV
R4733
EXB38V820JV
C4779
C4780
C4789
C4790
AY_WE
AY_CAS
AY_RAS
AY_BS
AY_A10
AY_A0
AY_A1
AY_A2
AY_A3
AY_A4
AY_A5
AY_A6
AY_A7
AY_A8
AY_A9
AY_CLK
AY_CKE
VDD
DQ0
VDDQ
DQ1
DQ2
VSSQ
DQ3
DQ4
DQ5
DQ6
DQ7
NC
DM0
/WE
/CAS
/RAS
/CS
BA0
BA1
A10/AC
A0
A1
A2
DM2
DQS2
DQ16
DQ17
DQ18
DQ19
DQ20
DQ21
DQ22
DQ23
VSS
DQ15
DQ14
DQ13
DQ12
DQ11
DQ10
DQ9
DQ8
DM1
CLK
CKE
A9
A8
A7
A6
A5
A4
A3
DM3
DQS3
DQ31
DQ30
DQ29
DQ28
DQ27
DQ26
DQ25
DQ24
R4729
EXB38V820JV
C4781
R4732
EXB38V820JV
C4791
AY_DQ16
AY_DQ17
AY_DQ18
AY_DQ19
AY_DQ20
AY_DQ21
AY_DQ22
AY_DQ23
AY_DQ24
AY_DQ25
AY_DQ26
AY_DQ27
AY_DQ28
AY_DQ29
AY_DQ30
AY_DQ31
C4782
C4792
R4730
EXB38V820JV
R4731
EXB38V820JV
C4783
C4784
C4785
4V
100
IC4518
K4S643232F-TC60
64M SDRAM
GC_RGB/PC_RGB
PC_B1
PC_G1
IC8200
M52055FP-70BD
IN3B
GND3
IN2A
SW2
VCC
IN2B
GND1
IN1A
IN3A
SW3
OUT3
OUT2
GND2
OUT1
SW1
IN1B
SW
GC_G
GC_R
GC_B
PC_R1
C8201
16V
47
C8203
0.01
R8213
220
SWB
R8210
1.5k
R8211
1.5k
R8214
220
SWG
R8212
1.5k
R8215
220
SWR
TV,VIDEO
PC
SW9V
L8200
EXCCL3225U1
R8255
1M
R8253
C8210
16V
10
R8216
0
C8206
16V
0.1
C8211
16V
0.1
C8212
16V
10
R8217
0
C8207
16V
0.1
C8213
16V
0.1
R8218
4700
L8201
EXCCL3225U1
C8208
16V
0.1
C8209
16V
0.1
TO
G-BOARD
(G18)
DG18
PC_B
PC_G
PC_R
R8001
75
R8004
22
D8001
MAZ31100ML
C8002
25V
22
PC_B1
R8002
75
R8005
22
D8002
MAZ31100ML
C8004
25V
22
PC_G1
R8003
75
R8006
22
D8003
MAZ31100ML
C8006
25V
22
NP
SW_HP
R8239
0
R8205
0
HD
SW_VP
R8240
0
R8206
0
VD
R8065
10K
R8066
0
FANSOS
FANMax/Min
R8067
0
FANONOFF
FAN_CONT
Q8011
2SD1819A-TX
C8010
0.01
C8011
16V
100/16V
R8055
4.7k
PC_HD
C8017
10[KB]
D8004
MA3X15300L
R8056
4.7k
R8057
4.7k
PC_VD
C8018
10[KB]
D8005
MA3X15300L
R8058
4.7k
55
56
57
58
59

TH-42PA20U DG-Board(7of8)Schematic Diagram


RGB-LPF
IC8201
C1AB00001720
GINA/UINA
GSG1
GINB/UINB
BINA/VINA
GSB1
BINB/VINB
DISABLE
GND3
BOUT/VOUT
VCC3
GND2
GOUT/UOUT
RINB/YINB
GSR1
RINA/YINA
VCC4
SYNCIN
MUXSEL
VFC
RFC
GND4
VCC1
ROUT/YOUT
GND1
VCC2
MAIN_5V
L8201 EXCCL3225U1
L8202 EXCCL3225U1
L8203 EXCCL3225U1
L8204 EXCCL3225U1
G_OUT4
LPF_G
LPF_B
LPF_R
HD_S
VD_S
HD
VD
SW_HP
SW_VP
LC8202 J0HAAB000012
LC8203 J0HAAB000012
LC8204 J0HAAB000012
LC8201 J0HAAB000012
LC8200 J0HAAB000012
LC8206 J0HAAB000012
JS8205
SW_CLP
AB_SDA3
AB_SCL3
TO D-BOARD (D3)
DG3
G
B
R
HD_S
VD_S
NCLP
RGB_ENB
NC
STB_ON
LEDCTRL_SOS
FAN_CONT
REMOCON_OUT
RXD_PC
GND
TXD_PC
RXD_TU
TXD_TU
POWER STATUS
CABLE DET
RESET
NCLP_S
LEDCTRL_SOS
FAN_CONT
REMOTE
TXD_TU
RXD_TU
POWER_STATUS
EX.DAC
IC8031
CXA1315M-T4
SW1
SW0
DAC4
DAC3
DAC2
DAC1
DAC0
GND
VCC
SCL
SDA
SAD2
SAD1
SAD0
SW3
SW2
FANSOS
FANMax/Min
FANONOFF
FAN_CONT
SW9V
LC8001 10U
SCL2
SDA2
SW3 sw2
0 0 X0 GC
1 0 X2 PC
DDC_SDA
DDC_SCL
DDC_WP
JS110
JS104
AC_SDA3
AC_SCL3
DG31
for factory
Q8011 2SD1819A-TX
Q8012 2SB1218A-TX_M
Q8013 2SD1819A-TX
Q8014 2SB1218A-TX_M
D8004 MA3X15300L
D8005 MA3X15300L
PC_HD
PC_VD
PC_HD55
PC_VD55
GC_VP
GC_HP
131
132
133
134
135
136
137
138
139
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141
142
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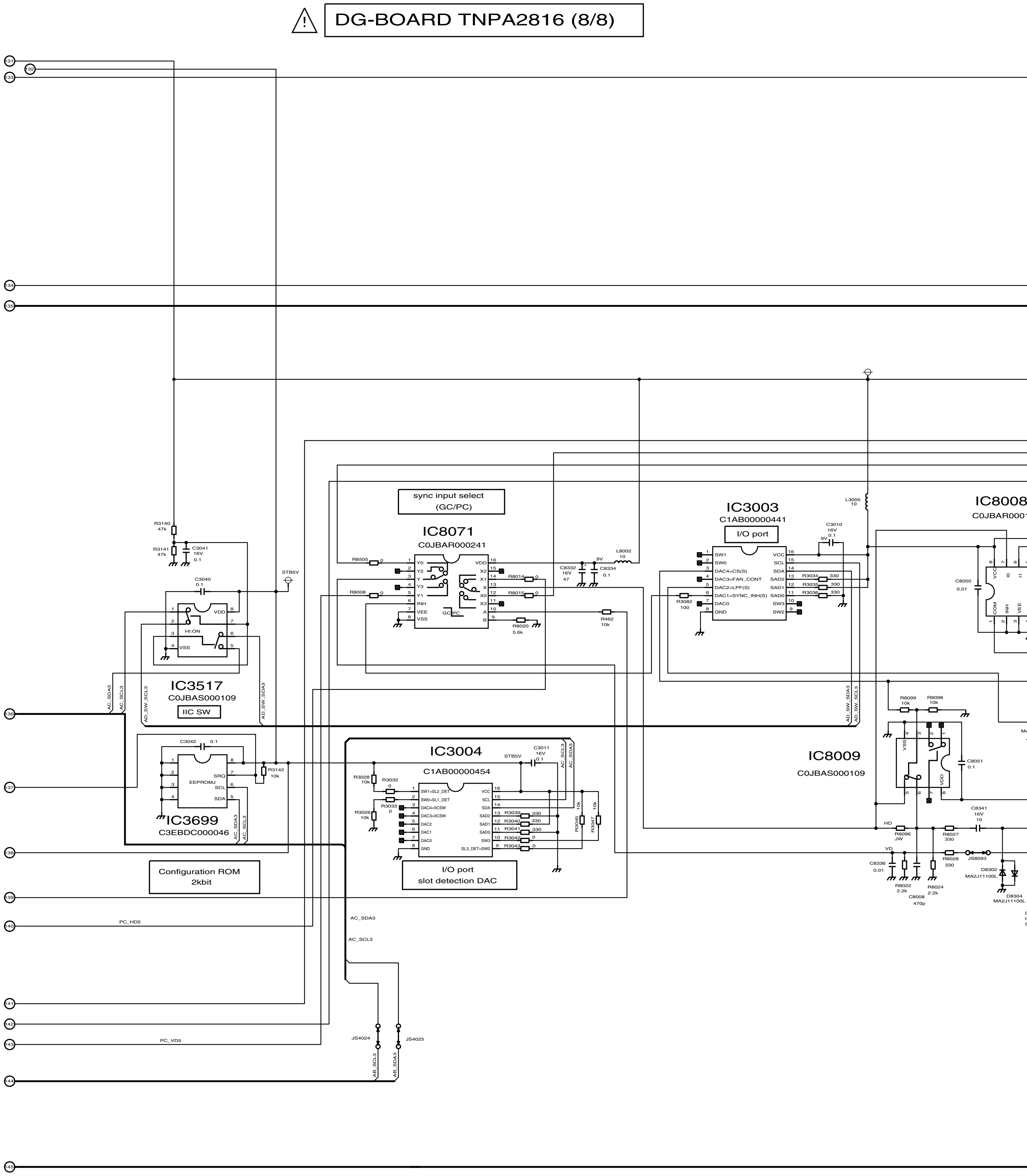
145

TH-42PA20U DG-Board(7of8)Schematic Diagram

59 60 61 62 63

14.22. DG-Board (8 of 8) Schematic Diagram


DG-BOARD TNPA2816 (8/8)
IC8071
C0JBAR000241
sync input select
(GC/PC)
IC3003
C1AB00000441
I/O port
IC8008
IC3517
C0JBAS000109
IIC SW
IC3004
C1AB00000454
I/O port
slot detection DAC
IC3699
C3EBDC000046
EEPROM
Configuration ROM
2kbit
IC8009
C0JBAS000109
R3140 47k
R3141 47k
C3041 16V 0.1
C3040 0.1
HI:ON
VDD
VSS
C3042 0.1
R3142 10k
SRQ
SCL
SDA
STB5V
R8505 0
R8008 0
R8014 0
R8015 0
R8020 5.6k
C8332 16V 47
C8334 0.1
9V
L8002 10
R462 10k
L3005 10
C3010 16V 0.1
R3082 100
R3034 330
R3035 330
R3036 330
SW1
SW0
DAC4=CS(S)
DAC3=FAN_CONT
DAC2=LPF(S)
DAC1=SYNC_INH(S)
DAC0
GND
VCC
SDA
SAD2
SAD1
SAD0
SW3
SW2
C8050 0.01
R3028 10k
R3032 0
R3033 0
R3026 10k
SW1=SL2_DET
SW0=SL1_DET
DAC4=IICSW
DAC3=IICSW
DAC2
DAC1
DAC0
SL3_DET=SW2
R3039 330
R3040 330
R3041 330
R3042 0
R3043 0
R3045 10k
R3047 10k
C3011 16V 0.1
AC_SDA3
AC_SCL3
AD_SW_SDA3
AD_SW_SCL3
AB_SCL3
AB_SDA3
JS4024
JS4025
PC_HD5
PC_VD5
R8099 10k
R8098 10k
C8051 0.1
C8341 16V 10
HD
VD
R8096 JW
R8027 330
R8028 330
JS8093
C8336 0.01
R8022 2.2k
R8024 2.2k
C8008 470p
D8302 MA2J11100L
D8304 MA2J11100L
131
132
133
134
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136
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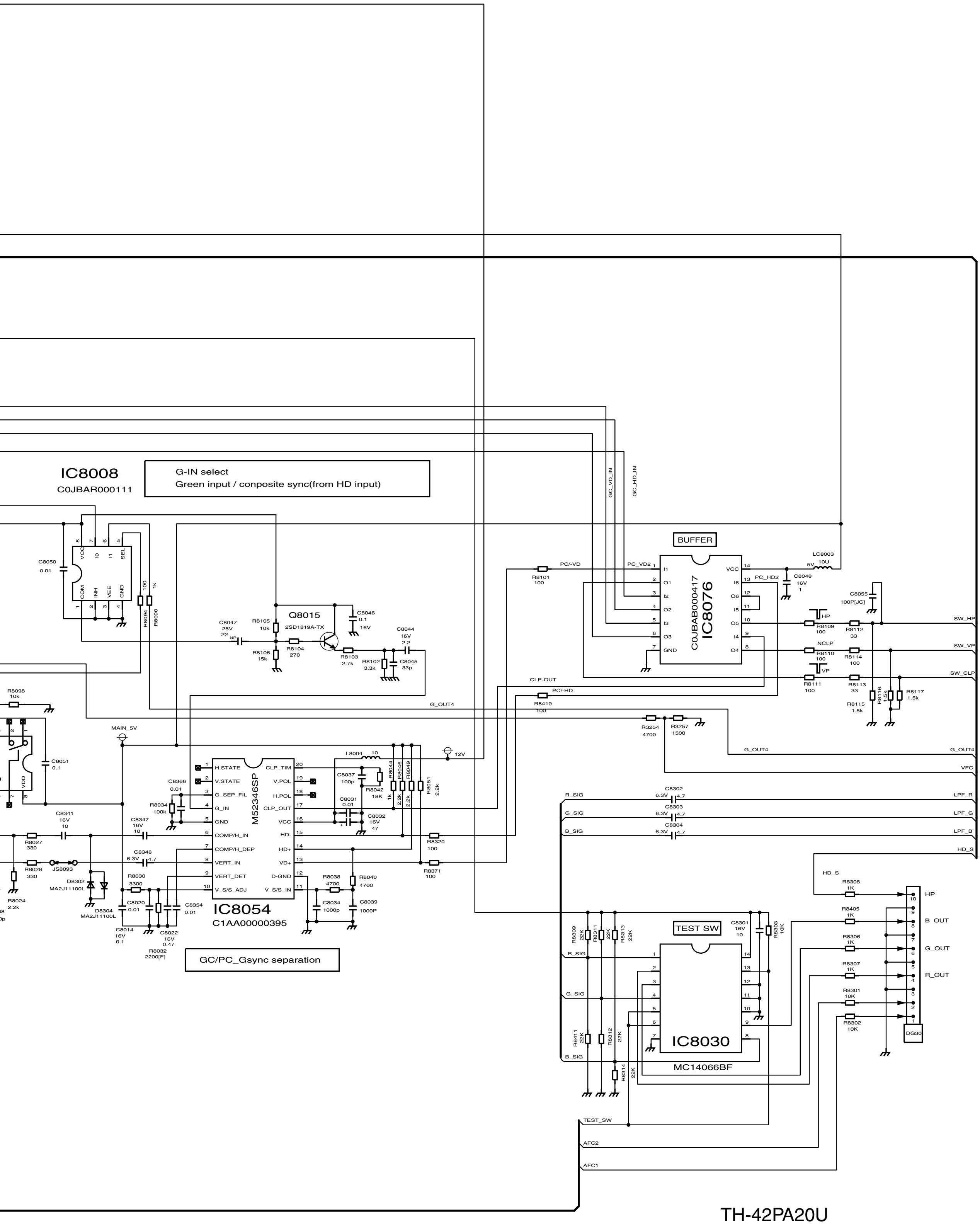
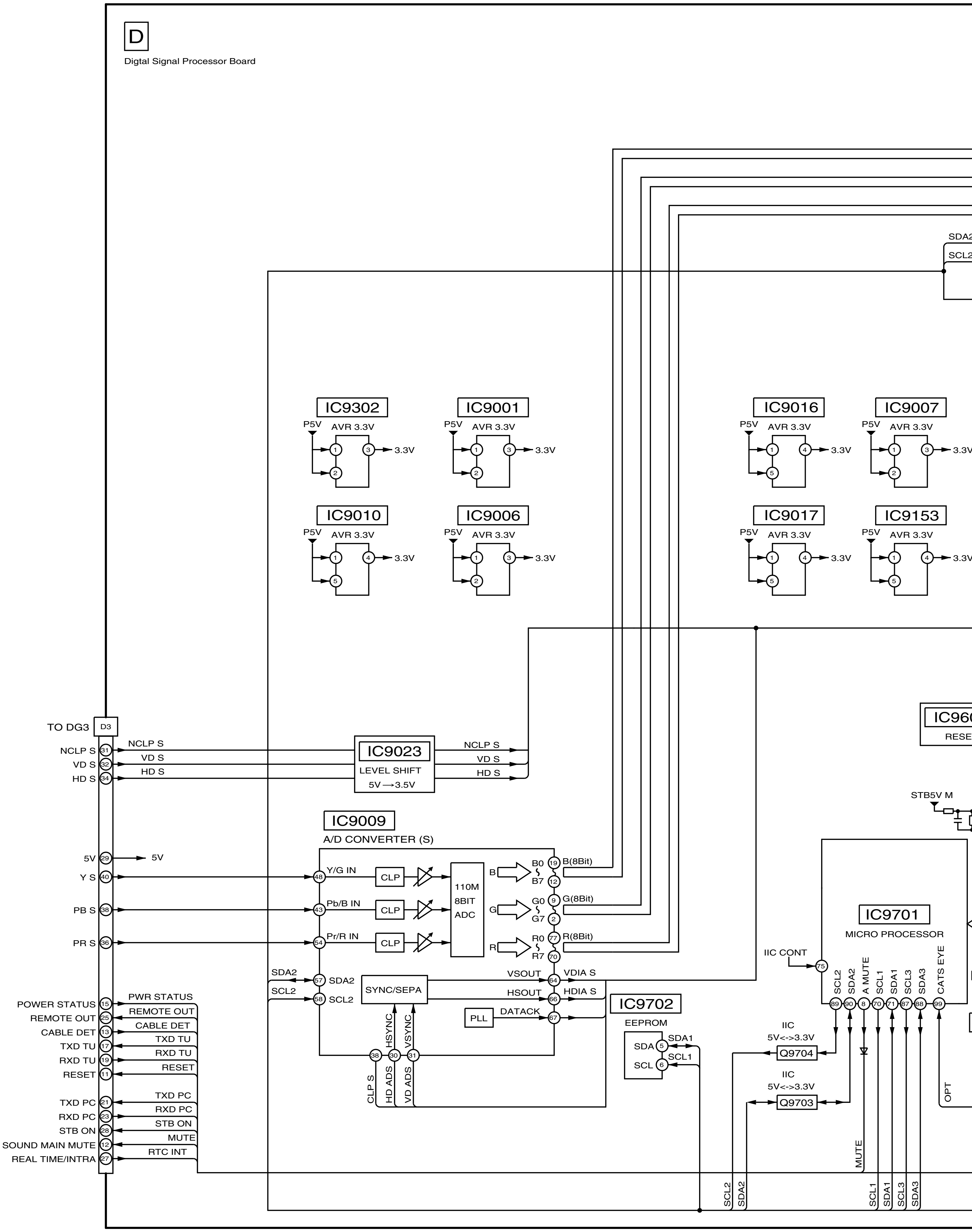
TH-42PA20U DG-Board(8of8)Schematic Diagram


IC8008
C0JBAR000111
G-IN select
Green input / conposite sync(from HD input)
Q8015
2SD1819A-TX
IC8054
C1AA00000395
M52346SP
GC/PC_Gsync separation
BUFFER
C0JBAB000417
IC8076
TEST SW
IC8030
MC14066BF
GC_VD_IN
GC_HD_IN
PC/-VD
PC_VD2
PC_HD2
CLP-OUT
PC/-HD
G_OUT4
MAIN_5V
12V
5V
LC8003
10U
SW_HP
SW_VP
SW_CLP
HP
NCLP
VP
VFC
R_SIG
G_SIG
B_SIG
LPF_R
LPF_G
LPF_B
HD_S
HP
B_OUT
G_OUT
R_OUT
DG30
TEST_SW
AFC2
AFC1
H.STATE
V.STATE
G_SEP_FIL
G_IN
GND
COMP/H_IN
COMP/H_DEP
VERT_IN
VERT_DET
V_S/S_ADJ
CLP_TIM
V.POL
H.POL
CLP_OUT
VCC
HD-
HD+
VD+
D-GND
V_S/S_IN
JS8093
D8302
MA2J11100L
D8304
MA2J11100L
L8004
R8101
R8409
R8410
R3254
R3257
R8308
R8405
R8306
R8307
R8301
R8302
C8302
C8303
C8304
C8301

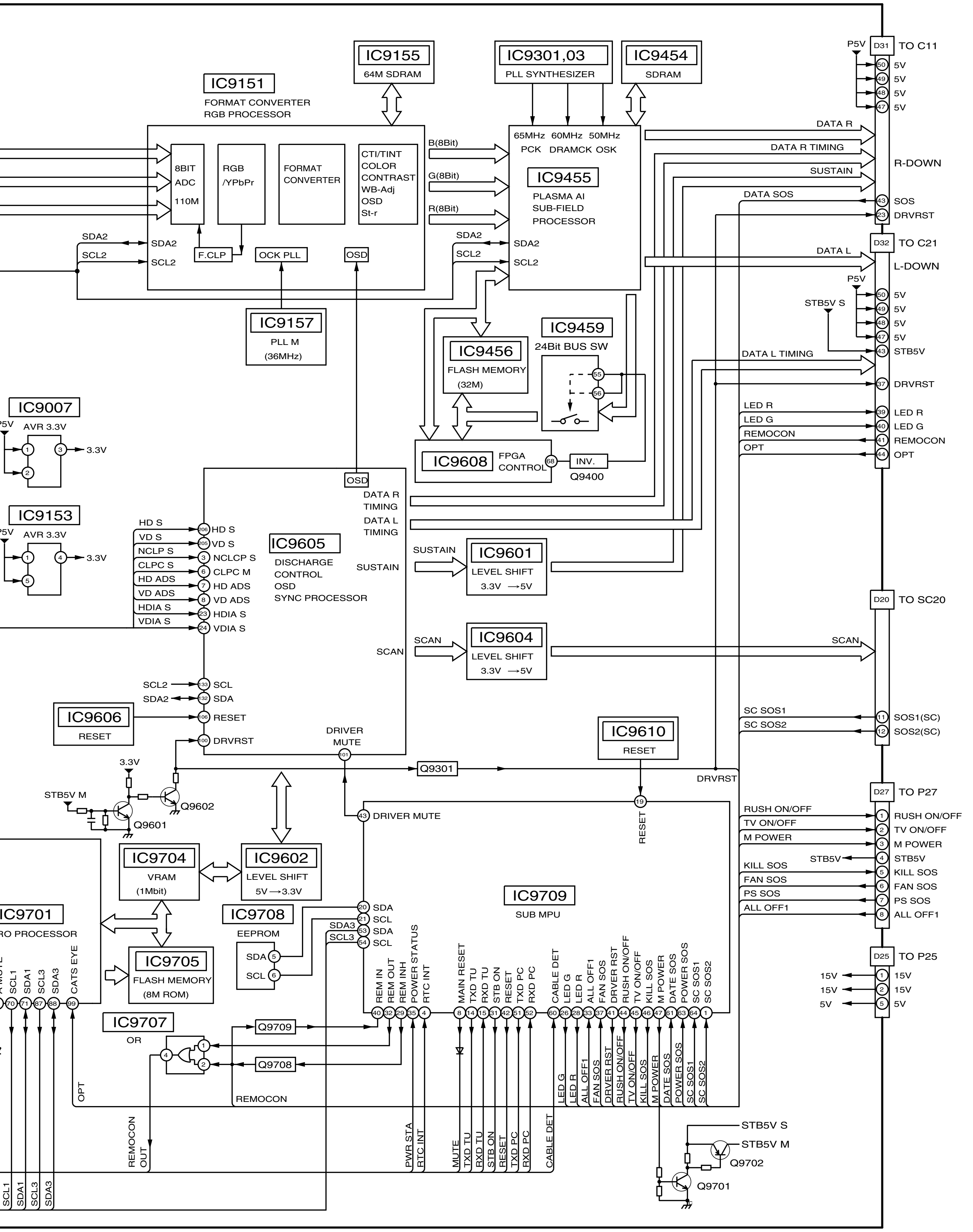
TH-42PA20U
DG-Board(8of8)Schematic Diagram

68 69 70 71 72

14.23. D-Board Block Diagram

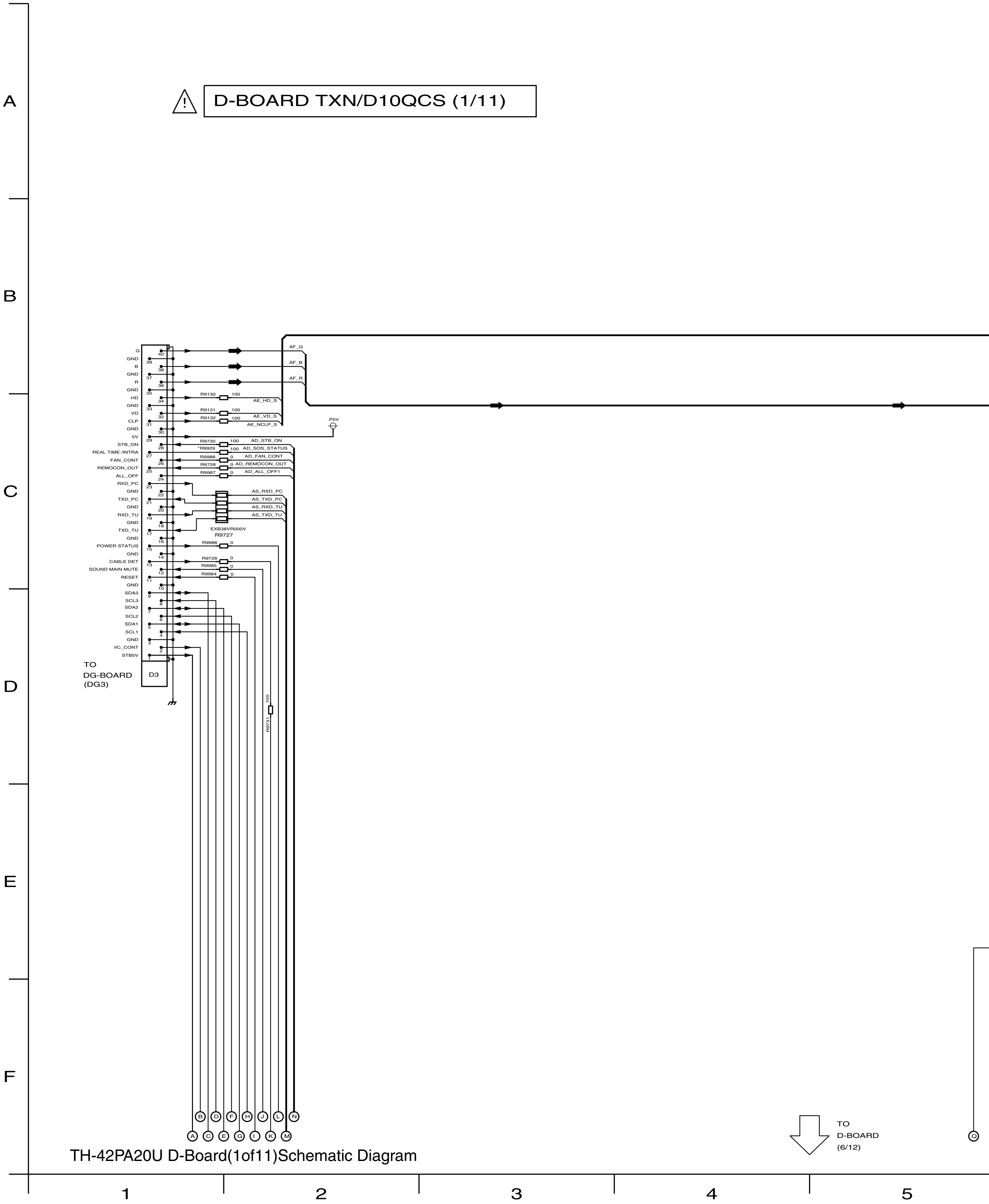

D
Digtal Signal Processor Board
IC9302
IC9001
IC9010
IC9006
IC9016
IC9007
IC9017
IC9153
P5V
AVR 3.3V
3.3V
SDA2
SCL2
TO DG3
D3
NCLP S
VD S
HD S
IC9023
LEVEL SHIFT
5V ⟶3.5V
IC9009
A/D CONVERTER (S)
5V
Y S
PB S
PR S
Y/G IN
Pb/B IN
Pr/R IN
CLP
110M
8BIT
ADC
B
G
R
B0
B7
G0
G7
R0
R7
B(8Bit)
G(8Bit)
R(8Bit)
SYNC/SEPA
VSOUT
HSOUT
VDIA S
HDIA S
PLL
DATACK
HSYNC
VSYNC
CLP S
HD ADS
VD ADS
IC9702
EEPROM
SDA
SCL
SDA1
SCL1
POWER STATUS
REMOTE OUT
CABLE DET
TXD TU
RXD TU
RESET
TXD PC
RXD PC
STB ON
SOUND MAIN MUTE
REAL TIME/INTRA
PWR STATUS
MUTE
RTC INT
IC9701
MICRO PROCESSOR
IIC CONT
SCL2
SDA2
A MUTE
SCL1
SDA1
SCL3
SDA3
CATS EYE
OPT
IIC
5V<->3.3V
Q9704
Q9703
MUTE
STB5V M
IC96
RESE

TH-42PA20U D-Board Block Diagram

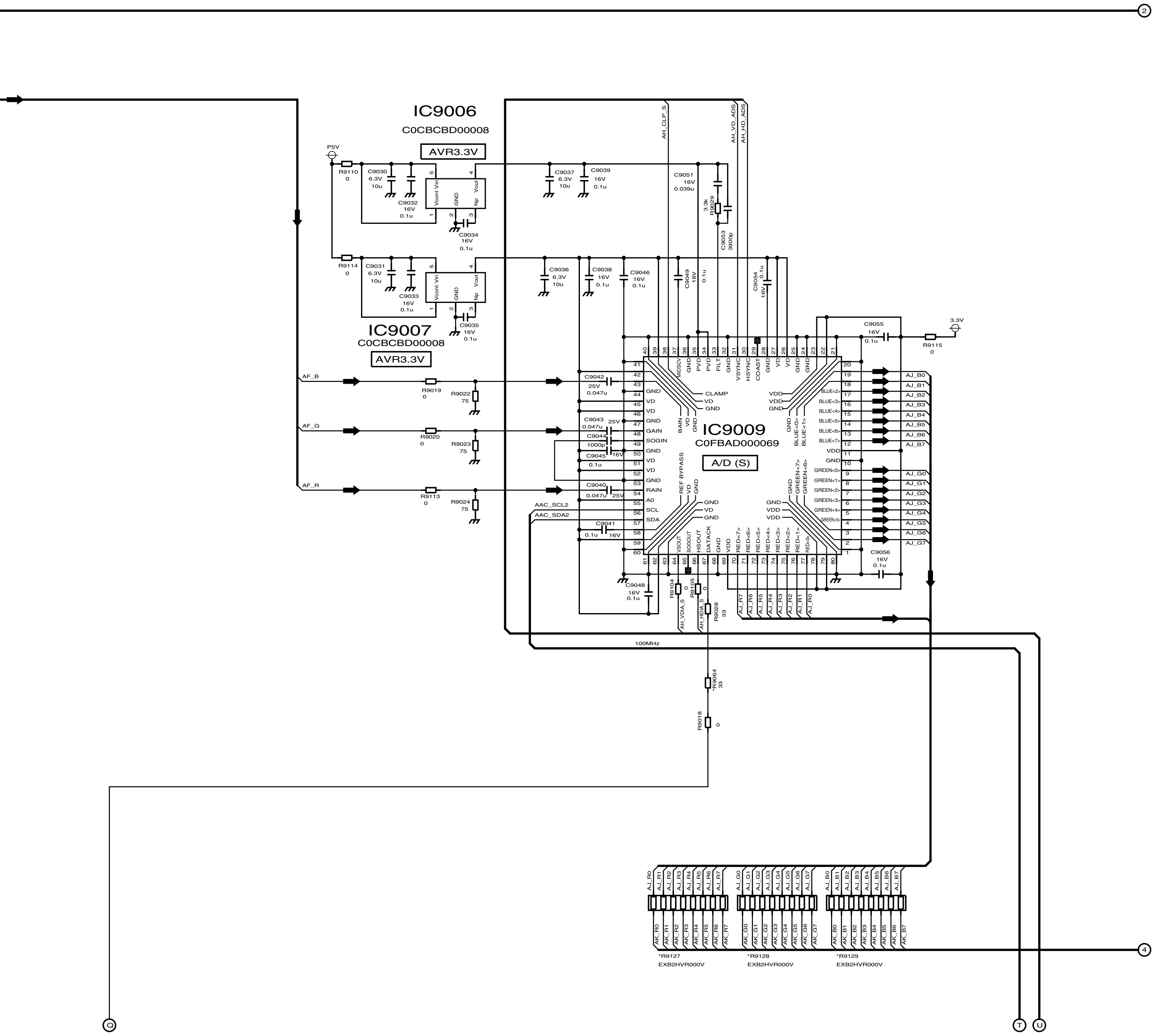

IC9155
64M SDRAM
IC9301,03
PLL SYNTHESIZER
IC9454
SDRAM
IC9151
FORMAT CONVERTER
RGB PROCESSOR
8BIT
ADC
110M
RGB
/YPbPr
FORMAT
CONVERTER
CTI/TINT
COLOR
CONTRAST
WB-Adj
OSD
St-r
F.CLP
OCK PLL
OSD
SDA2
SCL2
B(8Bit)
G(8Bit)
R(8Bit)
65MHz 60MHz 50MHz
PCK DRAMCK OSK
IC9455
PLASMA AI
SUB-FIELD
PROCESSOR
IC9157
PLL M
(36MHz)
IC9456
FLASH MEMORY
(32M)
IC9459
24Bit BUS SW
55
56
IC9608
FPGA
CONTROL
68
INV.
Q9400
IC9007
AVR 3.3V
P5V
3.3V
IC9153
AVR 3.3V
HD S
VD S
NCLP S
CLPC S
HD ADS
VD ADS
HDIA S
VDIA S
206 HD S
205 VD S
3 NCLCP S
6 CLPC M
7 HD ADS
8 VD ADS
23 HDIA S
24 VDIA S
IC9605
DISCHARGE
CONTROL
OSD
SYNC PROCESSOR
DATA R
TIMING
DATA L
TIMING
SUSTAIN
SCAN
133 SCL
132 SDA
106 RESET
100 DRVRST
DRIVER
MUTE
101
IC9606
RESET
IC9601
LEVEL SHIFT
3.3V →5V
IC9604
LEVEL SHIFT
3.3V →5V
IC9610
RESET
Q9301
DRVRST
3.3V
STB5V M
Q9601
Q9602
IC9704
VRAM
(1Mbit)
IC9602
LEVEL SHIFT
5V→3.3V
IC9701
RO PROCESSOR
IC9705
FLASH MEMORY
(8M ROM)
IC9708
EEPROM
SDA 5
SCL 6
IC9707
OR
Q9709
Q9708
REMOCON
OPT
REMOCON
OUT
A MUTE
SCL1
SDA1
SCL3
SDA3
CATS EYE
70 71 87 88 99
IC9709
SUB MPU
43 DRIVER MUTE
19 RESET
20 SDA
21 SCL
53 SDA
54 SCL
SDA3
SCL3
REM IN
REM OUT
REM INH
POWER STATUS
RTC INT
MAIN RESET
TXD TU
RXD TU
STB ON
RESET
TXD PC
RXD PC
CABLE DET
LED G
LED R
ALL OFF1
FAN SOS
DRVER RST
RUSH ON/OFF
TV ON/OFF
KILL SOS
M POWER
DATE SOS
POWER SOS
SC SOS1
SC SOS2
40 32 29 35 4
8 14 15 31 42 51 52
60 26 28 33 37 41 44 45 46 47 61 63 64 1
PWR STA
RTC INT
MUTE
TXD TU
RXD TU
STB ON
RESET
TXD PC
RXD PC
CABLE DET
STB5V S
STB5V M
Q9702
Q9701
P5V
D31
TO C11
50 5V
49 5V
48 5V
47 5V
DATA R
DATA R TIMING
SUSTAIN
R-DOWN
DATA SOS
43 SOS
23 DRVRST
D32
TO C21
DATA L
L-DOWN
STB5V S
50 5V
49 5V
48 5V
47 5V
43 STB5V
DATA L TIMING
37 DRVRST
LED R
LED G
REMOCON
OPT
39 LED R
40 LED G
41 REMOCON
44 OPT
D20
TO SC20
SCAN
SC SOS1
SC SOS2
11 SOS1(SC)
12 SOS2(SC)
D27
TO P27
RUSH ON/OFF
TV ON/OFF
M POWER
STB5V
KILL SOS
FAN SOS
PS SOS
ALL OFF1
1 RUSH ON/OFF
2 TV ON/OFF
3 M POWER
4 STB5V
5 KILL SOS
6 FAN SOS
7 PS SOS
8 ALL OFF1
D25
TO P25
15V
15V
5V
1 15V
2 15V
5 5V

TH-42PA20U D-Board Block Diagram

14.24. D-Board (1 of 11) Schematic Diagram


A
B
C
D
E
F
1
2
3
4
5
D-BOARD TXN/D10QCS (1/11)
G
GND
B
GND
R
GND
HD
GND
VD
CLP
GND
5V
STB_ON
REAL TIME /INTRA
FAN_CONT
REMOCON_OUT
ALL_OFF
RXD_PC
GND
TXD_PC
GND
RXD_TU
GND
TXD_TU
GND
POWER STATUS
GND
CABLE DET
SOUND MAIN MUTE
RESET
GND
SDA3
SCL3
SDA2
SCL2
SDA1
SCL1
GND
IIC_CONT
STB5V
40
39
38
37
36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
TO
DG-BOARD
(DG3)
D3
AF_G
AF_B
AF_R
R9130
100
AE_HD_S
R9131
100
AE_VD_S
R9132
100
AE_NCLP_S
P5V
R9730
100
AD_STB_ON
*R9929
100
AD_SOS_STATUS
R9988
0
AD_FAN_CONT
R9728
0
AD_REMOCON_OUT
R9987
0
AD_ALL_OFF1
AS_RXD_PC
AS_TXD_PC
AS_RXD_TU
AS_TXD_TU
EXB38VR000V
R9727
R9986
0
R9726
0
R9985
0
R9984
0
100
R9731
B
D
F
H
J
L
N
A
C
E
G
I
K
M
TO
D-BOARD
(6/12)
Q

TH-42PA20U D-Board(1of11)Schematic Diagram

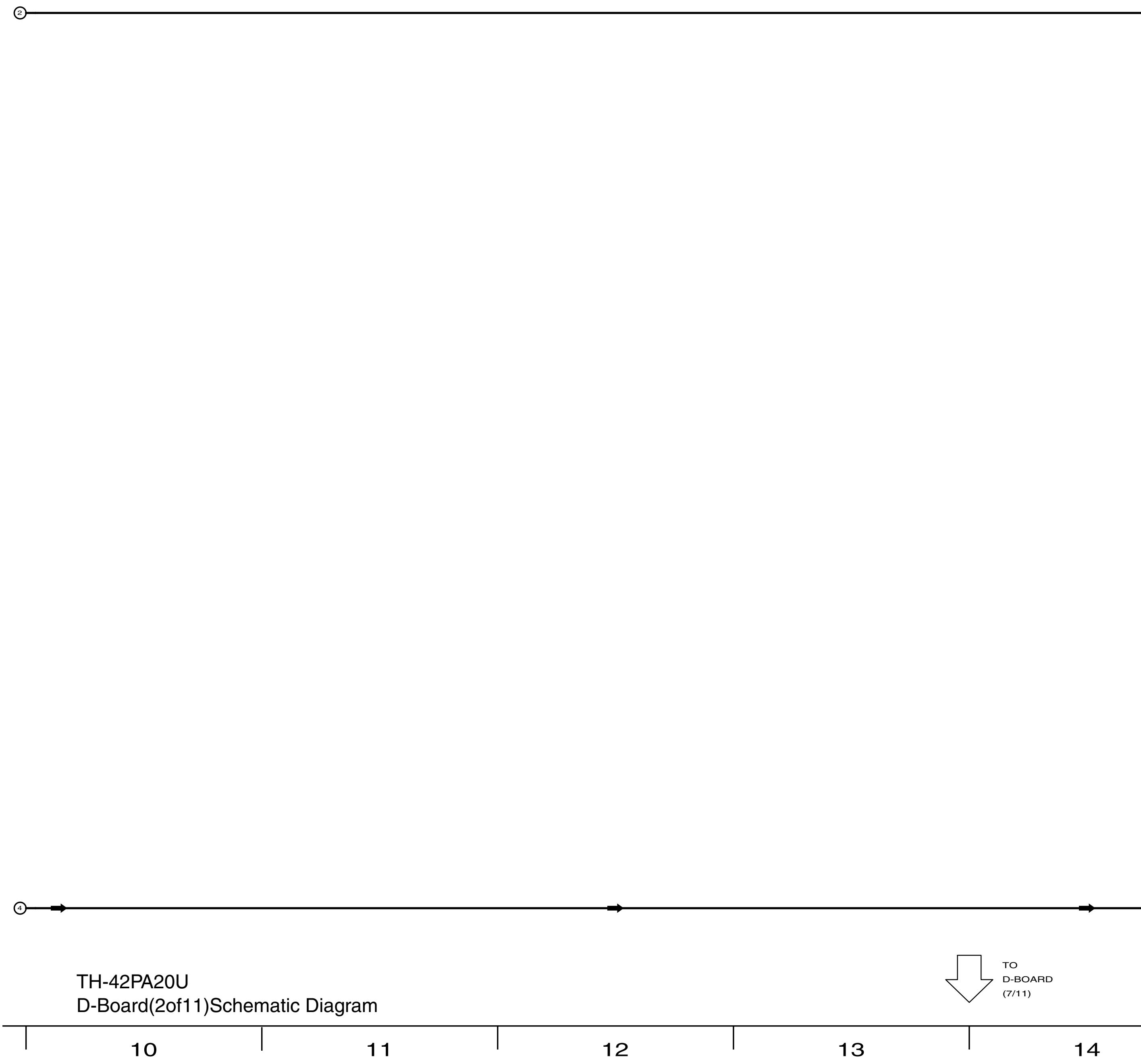

IC9006
C0CBCBD00008
AVR3.3V
IC9007
C0CBCBD00008
AVR3.3V
IC9009
C0FBAD000069
A/D (S)
P5V
R9110
R9114
C9030
C9031
C9032
C9033
C9034
C9035
C9036
C9037
C9038
C9039
C9040
C9041
C9042
C9043
C9044
C9045
C9046
C9048
C9049
C9051
C9053
C9054
C9055
C9056
R9029
R9115
R9019
R9020
R9113
R9022
R9023
R9024
R9104
R9105
R9028
R9064
R9018
3.3V
AF_B
AF_G
AF_R
AAC_SCL2
AAC_SDA2
AH_CLP_S
AH_VD_ADS
AH_HD_ADS
AH_VDIA_S
AH_HDIA_S
100MHz
CLAMP
BAIN
GAIN
SOGIN
RAIN
REF BYPASS
SCL
SDA
VSYNC
HSYNC
COAST
DATACK
VSOUT
SOGOUT
HSOUT
AJ_B0
AJ_B1
AJ_B2
AJ_B3
AJ_B4
AJ_B5
AJ_B6
AJ_B7
AJ_G0
AJ_G1
AJ_G2
AJ_G3
AJ_G4
AJ_G5
AJ_G6
AJ_G7
AJ_R0
AJ_R1
AJ_R2
AJ_R3
AJ_R4
AJ_R5
AJ_R6
AJ_R7
*R9127
EXB2HVR000V
*R9128
EXB2HVR000V
*R9129
EXB2HVR000V
②
④
Q
T
U

TH-42PA20U D-Board(1of11)Schematic Diagram

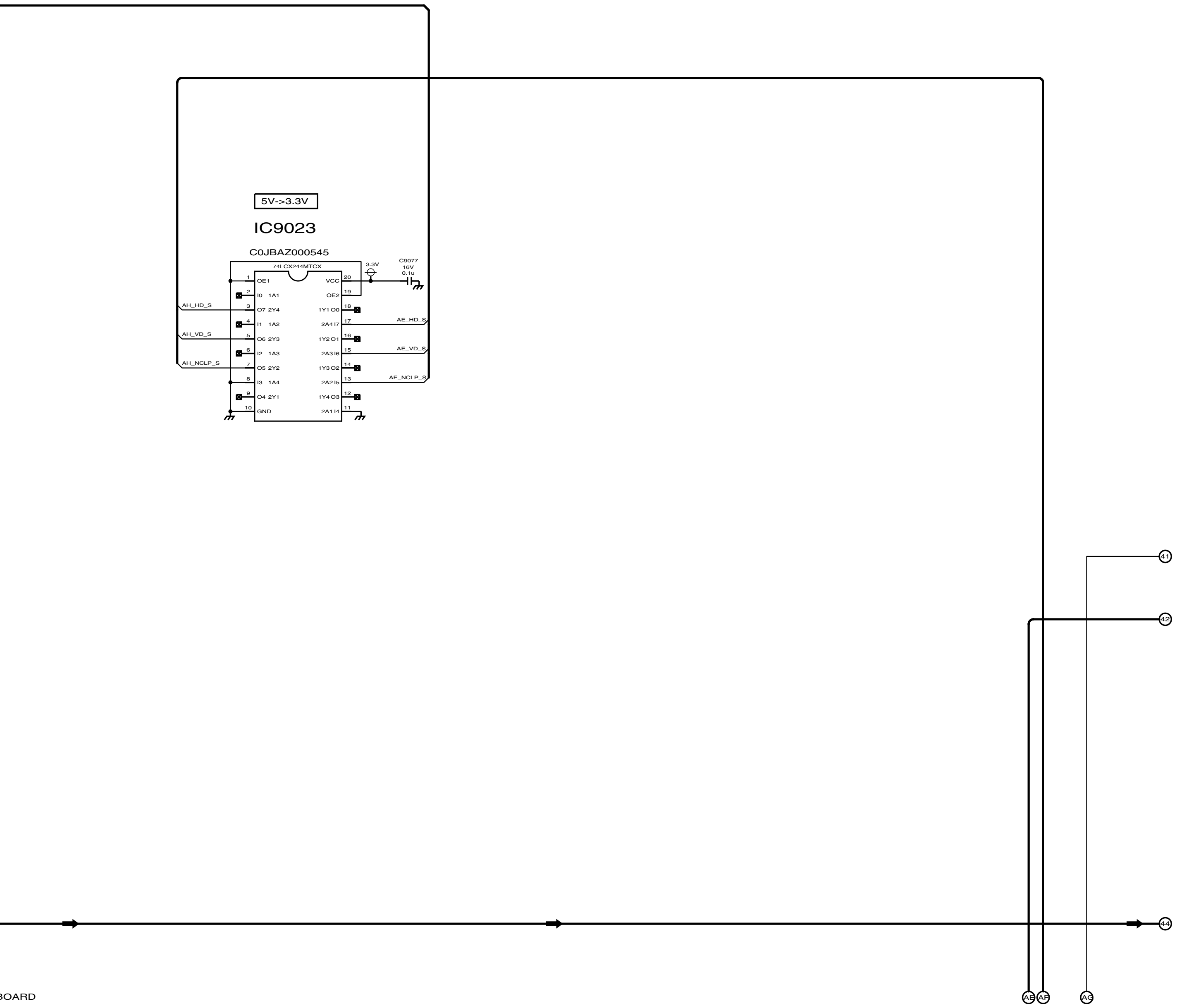
5 6 7 8 9

14.25. D-Board (2 of 11) Schematic Diagram

⚠ D-BOARD TXN/D10QCS (2/11)


②
④
TO
D-BOARD
(7/11)
10
11
12
13
14

TH-42PA20U
D-Board(2of11)Schematic Diagram

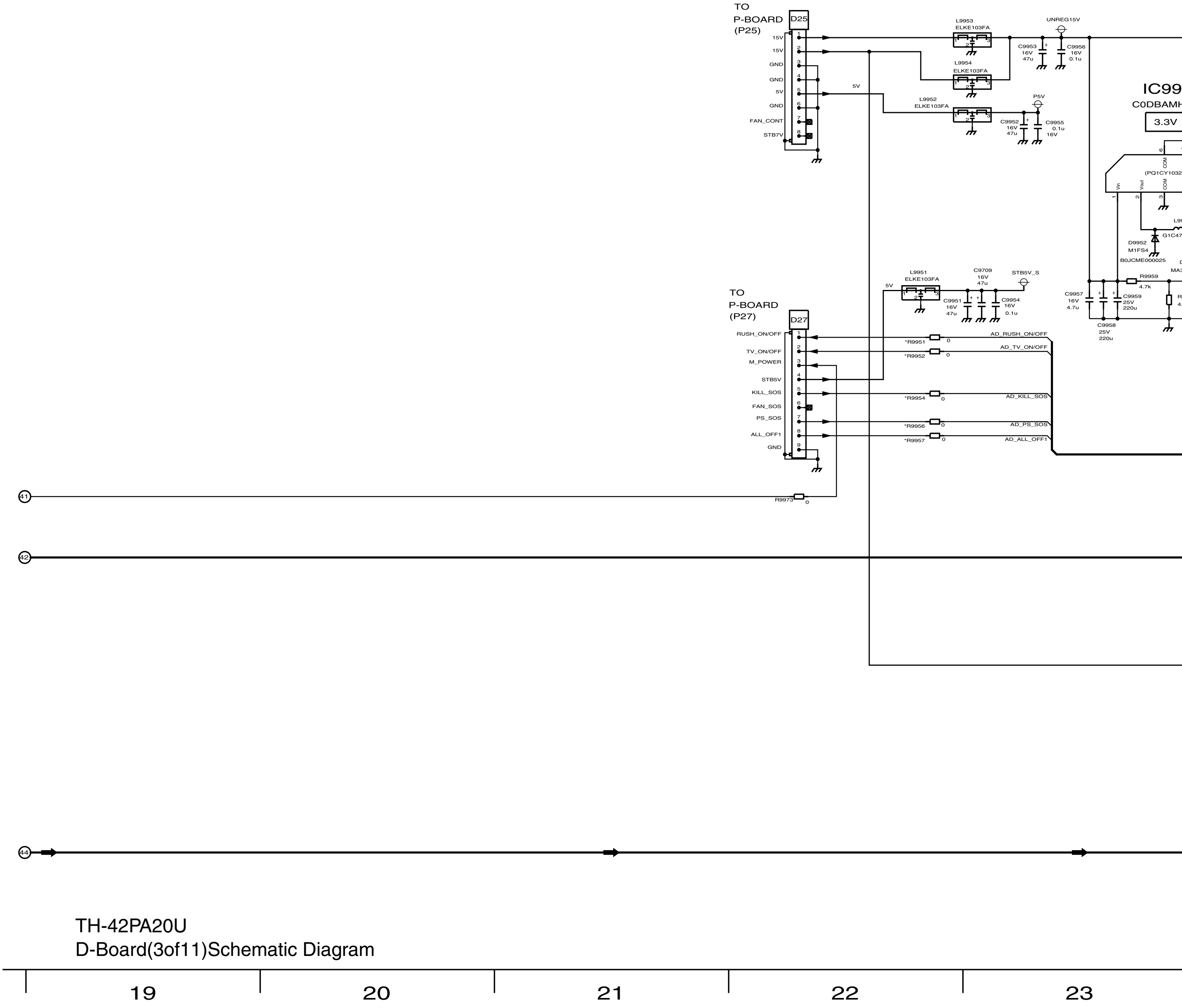

5V->3.3V
IC9023
C0JBAZ000545
74LCX244MTCX
1 OE1
2 I0 1A1
3 O7 2Y4
4 I1 1A2
5 O6 2Y3
6 I2 1A3
7 O5 2Y2
8 I3 1A4
9 O4 2Y1
10 GND
20 VCC
19 OE2
18 1Y1 O0
17 2A4 I7
16 1Y2 O1
15 2A3 I6
14 1Y3 O2
13 2A2 I5
12 1Y4 O3
11 2A1 I4
3.3V
C9077
16V
0.1u
AH_HD_S
AH_VD_S
AH_NCLP_S
AE_HD_S
AE_VD_S
AE_NCLP_S
41
42
44
AE
AF
AG
BOARD
11)

TH-42PA20U D-Board(2of11)Schematic Diagram

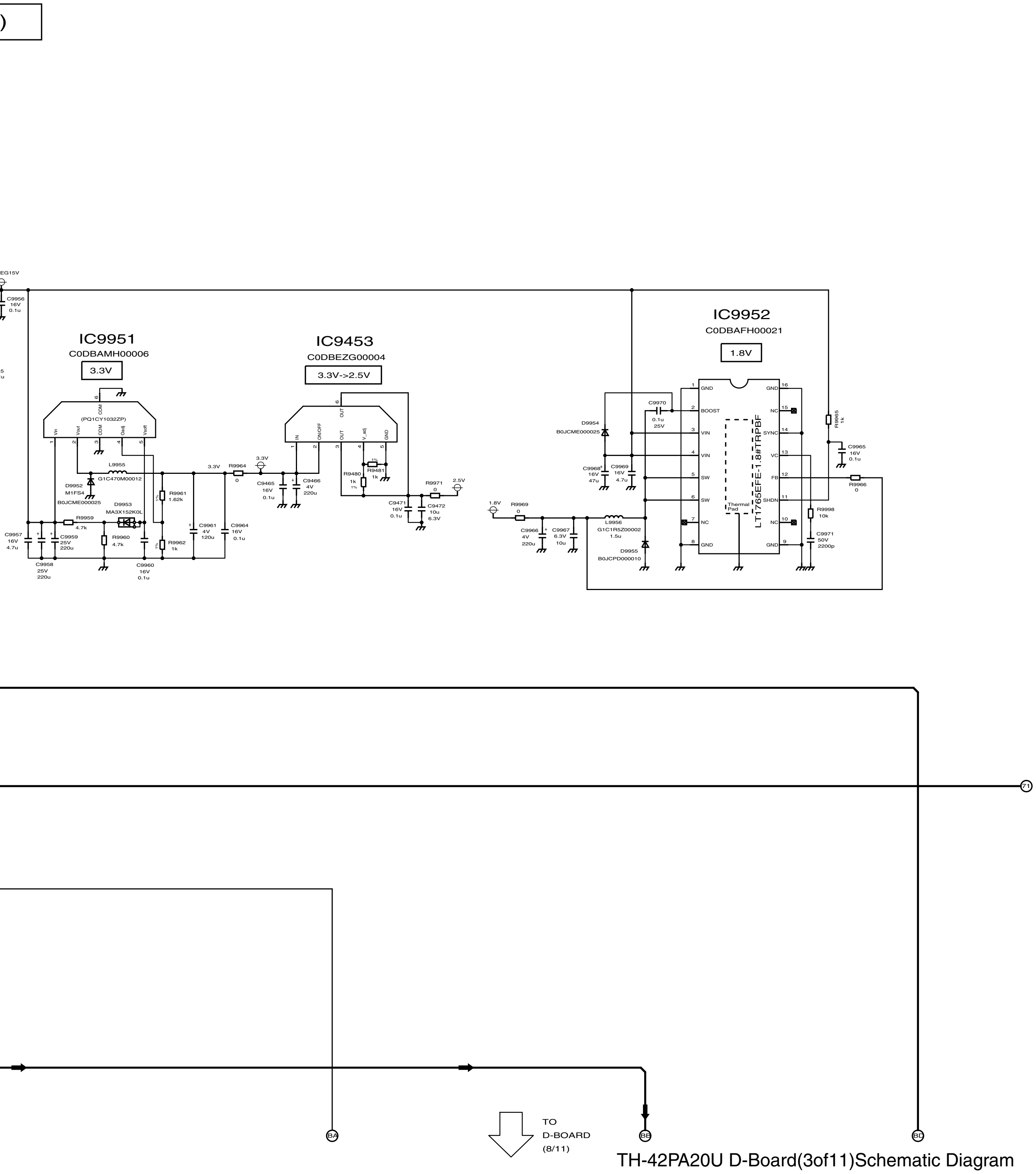
14
15
16
17
18

14.26. D-Board (3 of 11) Schematic Diagram

D-BOARD TXN/D10QCS (3/11)


TO
P-BOARD
(P25)
D25
15V
15V
GND
GND
5V
GND
FAN_CONT
STB7V
5V
L9953
ELKE103FA
L9954
ELKE103FA
L9952
ELKE103FA
UNREG15V
C9953
16V
47u
C9956
16V
0.1u
P5V
C9952
16V
47u
C9955
0.1u
16V
IC99
C0DBAMH
3.3V
COM
(PQ1CY1032
Vin
Vout
COM
L99
G1C47
D9952
M1FS4
B0JCME000025
MA3
R9959
4.7k
C9957
16V
4.7u
C9959
25V
220u
C9958
25V
220u
L9951
ELKE103FA
C9709
16V
47u
STB5V_S
5V
C9951
16V
47u
C9954
16V
0.1u
TO
P-BOARD
(P27)
D27
RUSH_ON/OFF
TV_ON/OFF
M_POWER
STB5V
KILL_SOS
FAN_SOS
PS_SOS
ALL_OFF1
GND
*R9951
0
*R9952
0
*R9954
0
*R9956
0
*R9957
0
AD_RUSH_ON/OFF
AD_TV_ON/OFF
AD_KILL_SOS
AD_PS_SOS
AD_ALL_OFF1
R9973
0
41
42
44
19
20
21
22
23

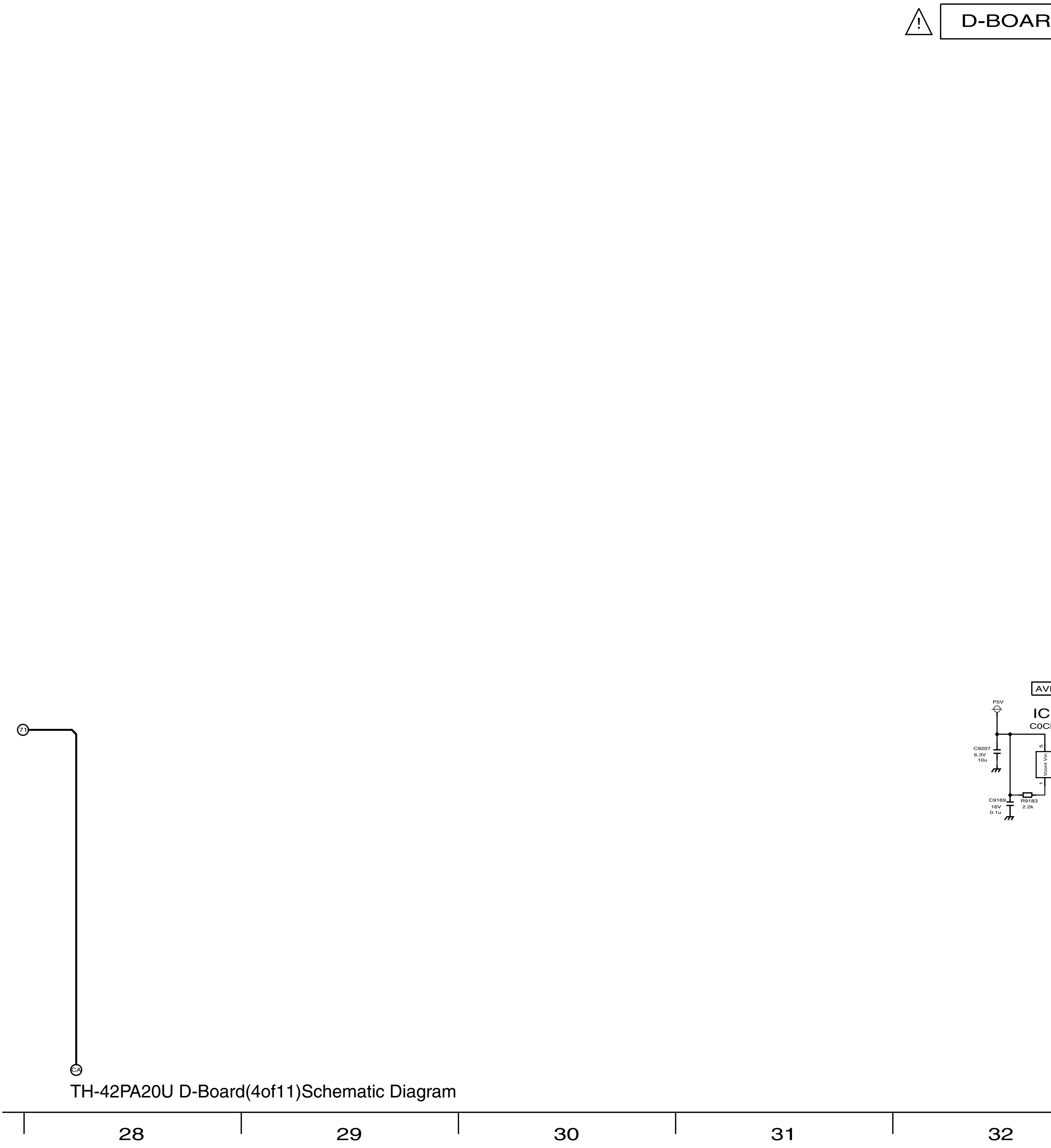
TH-42PA20U
D-Board(3of11)Schematic Diagram


REG15V
C9956 16V 0.1u
IC9951
C0DBAMH00006
3.3V
(PQ1CY1032ZP)
Vin
Vout
COM
Oadj
Voff
L9955
G1C470M00012
D9952
M1FS4
B0JCME000025
D9953
MA3X152K0L
R9959 4.7k
R9960 4.7k
R9961 1.62k
R9962 1k
C9957 16V 4.7u
C9958 25V 220u
C9959 25V 220u
C9960 16V 0.1u
C9961 4V 120u
C9964 16V 0.1u
3.3V
R9964 0
IC9453
C0DBEZG00004
3.3V->2.5V
IN
ON/OFF
OUT
V_adj
GND
C9465 16V 0.1u
C9466 4V 220u
R9480 1k
R9481 1k
C9471 16V 0.1u
C9472 10u 6.3V
R9971 0
2.5V
1.8V
R9969 0
C9966 4V 220u
C9967 6.3V 10u
L9956
G1C1R5Z00002
1.5u
D9955
B0JCPD000010
D9954
B0JCME000025
C9968 16V 47u
C9969 16V 4.7u
C9970 0.1u 25V
IC9952
C0DBAFH00021
1.8V
GND
BOOST
VIN
SW
NC
SYNC
VC
FB
SHDN
Thermal Pad
LT1765EFE-1.8#TRPBF
R9965 1k
C9965 16V 0.1u
R9966 0
R9998 10k
C9971 50V 2200p
71
BA
BB
BD
TO
D-BOARD
(8/11)

TH-42PA20U D-Board(3of11)Schematic Diagram

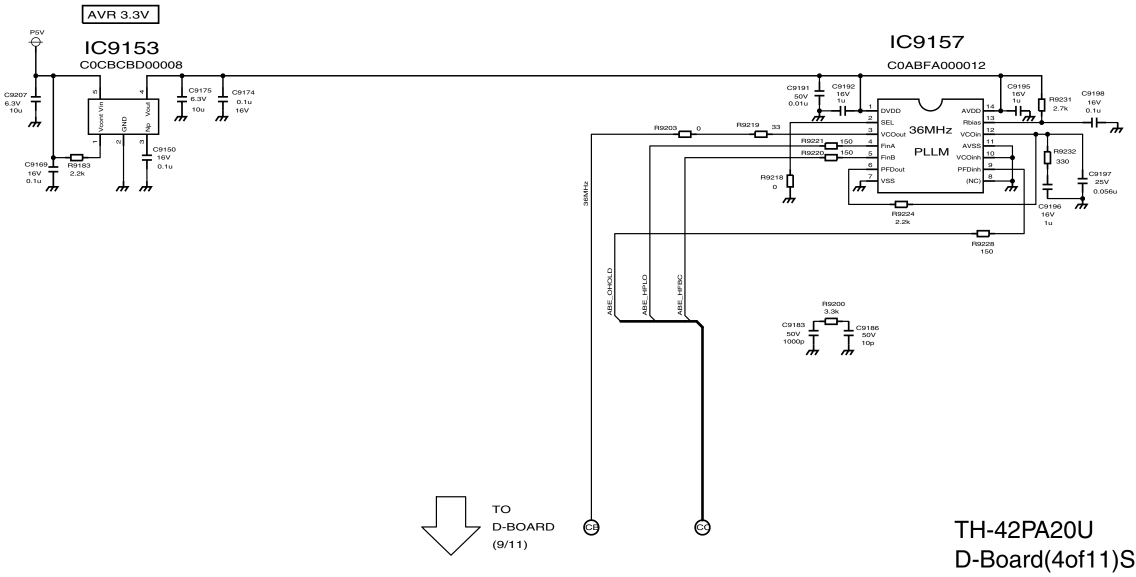
23 24 25 26 27

14.27. D-Board (4 of 11) Schematic Diagram


D-BOAR
AVI
P5V
IC
C0C
C9207
6.3V
10u
C9169
16V
0.1u
R9183
2.2k
Vcont Vin
71
CA
28
29
30
31
32

TH-42PA20U D-Board(4of11)Schematic Diagram

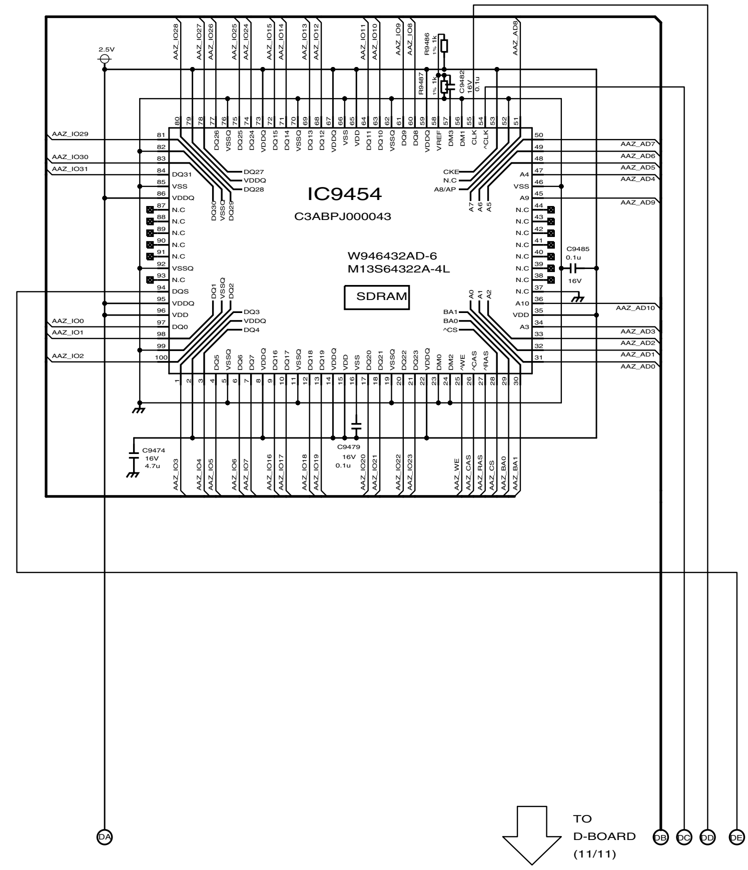
D-BOARD TXN/D10QCS (4/11)


AVR 3.3V
P5V
IC9153
C0CBCBD00008
C9207
6.3V
10u
5
4
Vcont Vin
GND
Np
Vout
1
2
3
C9175
6.3V
10u
C9174
0.1u
16V
C9169
16V
0.1u
R9183
2.2k
C9150
16V
0.1u
IC9157
C0ABFA000012
C9191
50V
0.01u
C9192
16V
1u
C9195
16V
1u
R9231
2.7k
C9198
16V
0.1u
R9203
0
R9219
33
R9221
150
R9220
150
R9218
0
1 DVDD
2 SEL
3 VCOout
4 FinA
5 FinB
6 PFDout
7 VSS
36MHz
PLLM
14 AVDD
13 Rbias
12 VCOin
11 AVSS
10 VCOinh
9 PFDinh
8 (NC)
R9232
330
C9197
25V
0.056u
C9196
16V
1u
R9224
2.2k
R9228
150
36MHz
ABE_OHOLD
ABE_HPLO
ABE_HFBC
R9200
3.3k
C9183
50V
1000p
C9186
50V
10p
TO
D-BOARD
(9/11)
CB
CC
32
33
34
35
36

TH-42PA20U
D-Board(4of11)Schematic Diagram

14.28. D-Board (5 of 11) Schematic Diagram

⚠ D-BOARD TXN/D10QCS (5/11)



IC9454
C3ABPJ000043
W946432AD-6
M13S64322A-4L
SDRAM
2.5V
AAZ_IO29
AAZ_IO30
AAZ_IO31
AAZ_IO0
AAZ_IO1
AAZ_IO2
AAZ_AD7
AAZ_AD6
AAZ_AD5
AAZ_AD4
AAZ_AD9
AAZ_AD10
AAZ_AD3
AAZ_AD2
AAZ_AD1
AAZ_AD0
R9486
R9487
C9482
C9485
0.1u
16V
C9474
16V
4.7u
C9479
16V
0.1u
DA
TO
D-BOARD
(11/11)
DB
DC
DD
DE

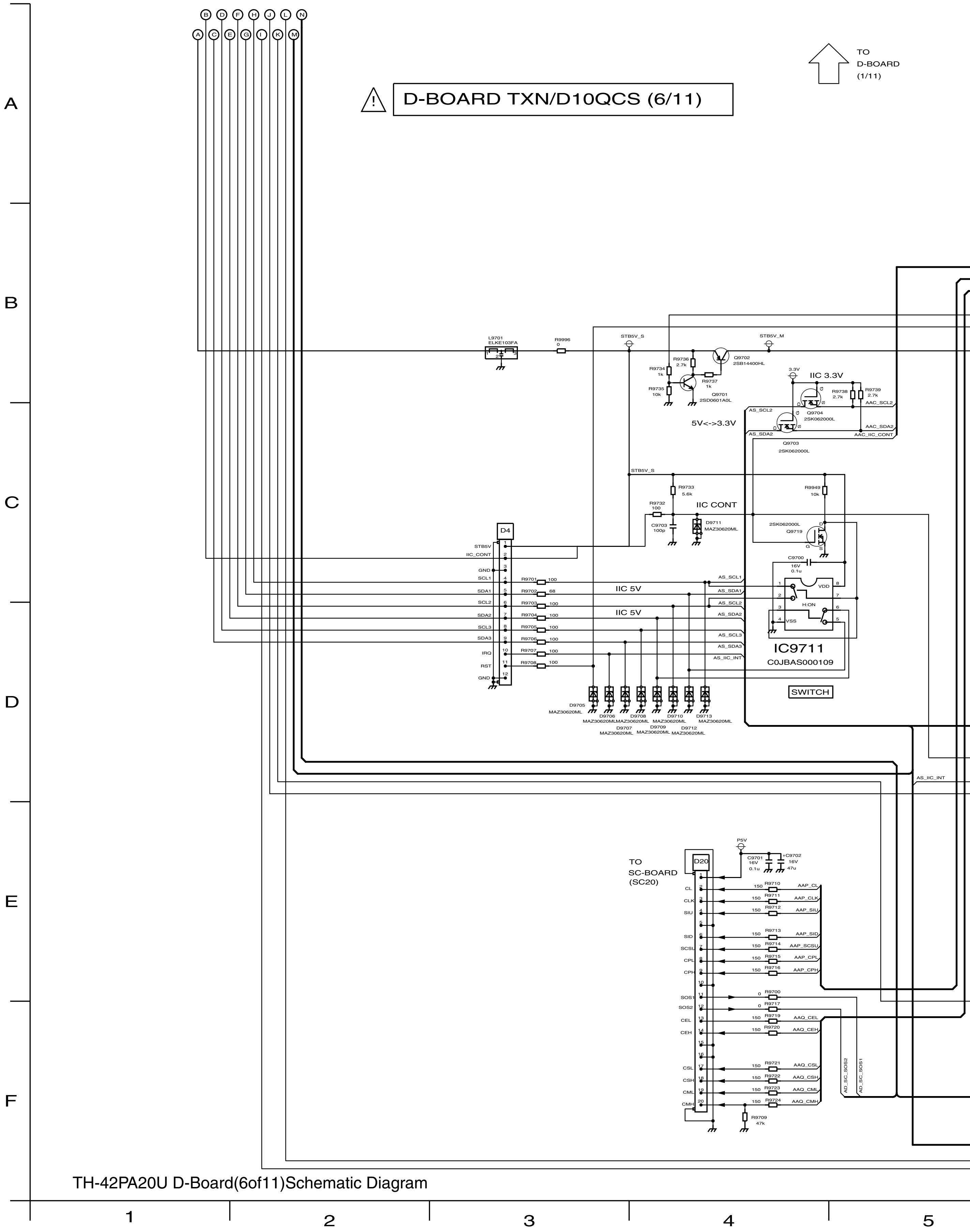
TH-42PA20U
D-Board(5of11)Schematic Diagram

46 47 48 49 50

TH-42PA20U
D-Board(5of11)Schematic Diagram

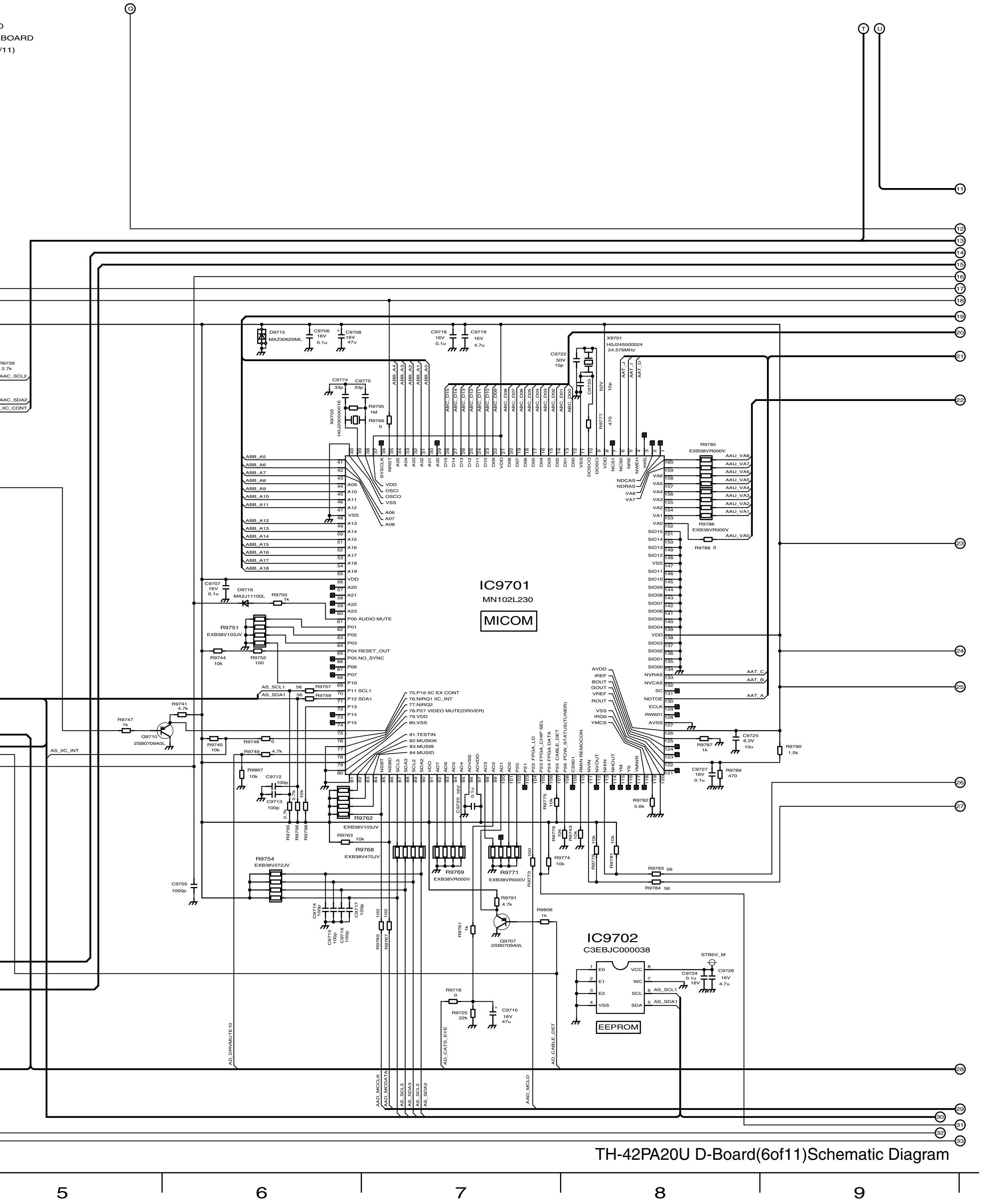
50 51 52 53 54

14.29. D-Board (6 of 11) Schematic Diagram



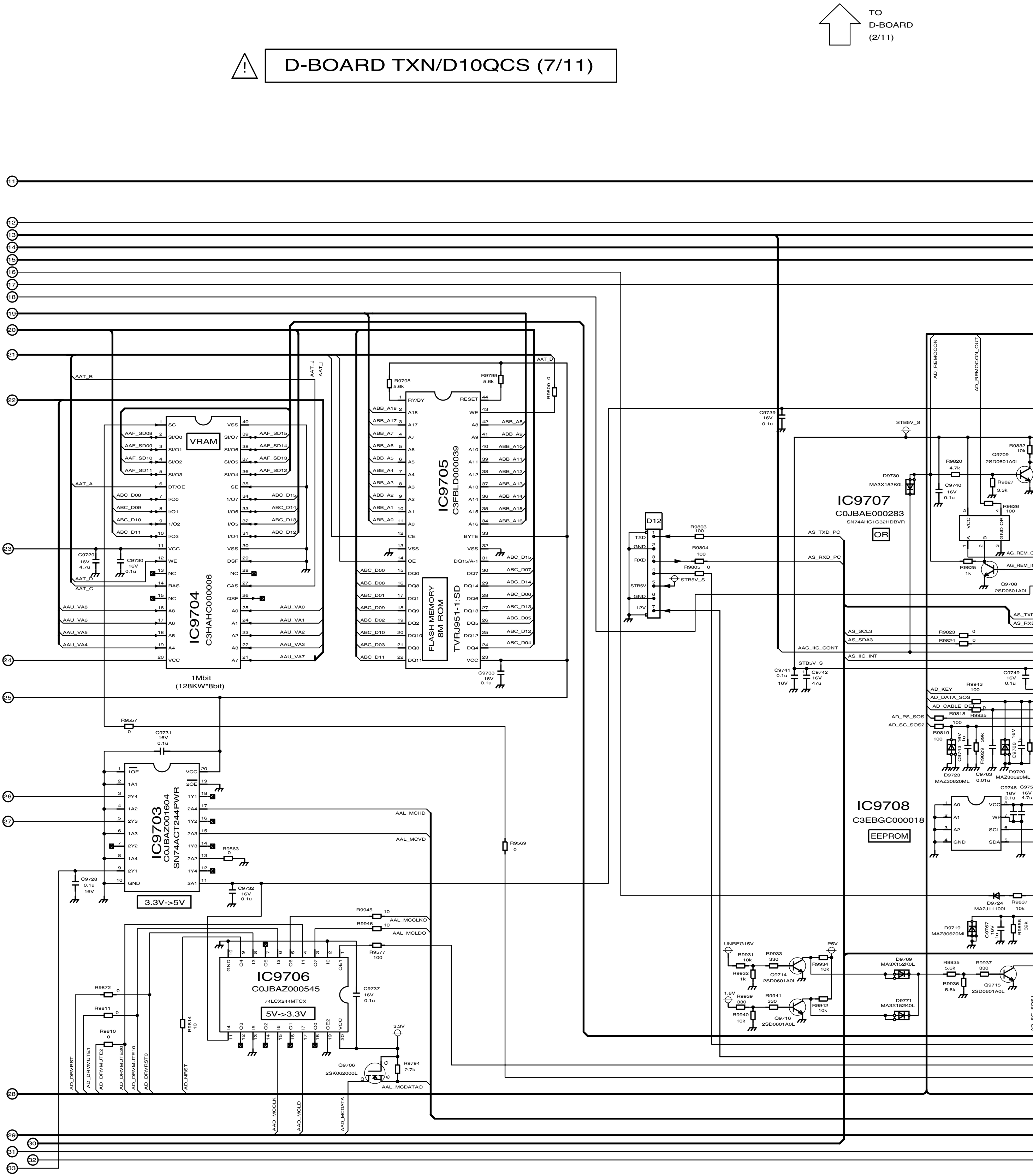
A
B
C
D
E
F
1
2
3
4
5
TO
D-BOARD
(1/11)
D-BOARD TXN/D10QCS (6/11)
L9701
ELKE103FA
R9996
0
STB5V_S
STB5V_M
R9736
2.7k
R9734
1k
R9737
1k
R9735
10k
Q9702
2SB14400HL
Q9701
2SD0601A0L
5V<->3.3V
3.3V
IIC 3.3V
R9738
2.7k
R9739
2.7k
AAC_SCL2
AS_SCL2
Q9704
2SK062000L
AAC_SDA2
AS_SDA2
AAC_IIC_CONT
Q9703
2SK062000L
R9733
5.6k
R9949
10k
R9732
100
IIC CONT
C9703
100p
D9711
MAZ30620ML
2SK062000L
Q9719
D4
STB5V
IIC_CONT
GND
SCL1
SDA1
SCL2
SDA2
SCL3
SDA3
IRQ
RST
R9701
R9702
R9703
R9704
R9705
R9706
R9707
R9708
100
68
IIC 5V
AS_SCL1
AS_SDA1
AS_SCL2
AS_SDA2
AS_SCL3
AS_SDA3
AS_IIC_INT
C9700
16V
0.1u
VDD
H:ON
VSS
IC9711
C0JBAS000109
SWITCH
D9705
MAZ30620ML
D9706
D9707
D9708
D9709
D9710
D9712
D9713
MAZ30620ML
AS_IIC_INT
P5V
TO
SC-BOARD
(SC20)
D20
C9701
16V
0.1u
C9702
16V
47u
CL
CLK
SIU
SID
SCSU
CPL
CPH
SOS1
SOS2
CEL
CEH
CSL
CSH
CML
CMH
R9710
R9711
R9712
R9713
R9714
R9715
R9716
R9700
R9717
R9719
R9720
R9721
R9722
R9723
R9724
150
0
AAP_CL
AAP_CLK
AAP_SIU
AAP_SID
AAP_SCSU
AAP_CPL
AAP_CPH
AAQ_CEL
AAQ_CEH
AAQ_CSL
AAQ_CSH
AAQ_CML
AAQ_CMH
AD_SC_SOS2
AD_SC_SOS1
R9709
47k

TH-42PA20U D-Board(6of11)Schematic Diagram


IC9701
MN102L230
MICOM
IC9702
C3EBJC000038
EEPROM
5
6
7
8
9

TH-42PA20U D-Board(6of11)Schematic Diagram

14.30. D-Board (7 of 11) Schematic Diagram


TO D-BOARD (2/11)
D-BOARD TXN/D10QCS (7/11)
VRAM
IC9704
C3HAHC000006
1Mbit (128KW*8bit)
IC9705
C3FBLD000039
FLASH MEMORY 8M ROM
TVRJ951-1:SD
IC9707
C0JBAE000283
SN74AHC1G32HDBVR
OR
IC9708
C3EBGC000018
EEPROM
IC9703
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9706
C0JBAZ000545
74LCX244MTCX
5V->3.3V
D12
TXD
GND
RXD
STB5V
GND
12V
AS_TXD_PC
AS_RXD_PC
AS_SCL3
AS_SDA3
AAC_IIC_CONT
AS_IIC_INT
STB5V_S
UNREG15V
P5V
AAL_MCHD
AAL_MCVD
AAL_MCCLKO
AAL_MCLDO
AAL_MCDATAO
AD_DRVRST
AD_DRVMUTE1
AD_DRVMUTE20
AD_DRVMUTE10
AD_DRVRST0
AD_NRST
AAD_MCCLK
AAD_MCLD
AAD_MCDATA
AD_REMOCON
AD_REMOCON_OUT
AD_KEY
AD_DATA_SOS
AD_CABLE_DET
AD_PS_SOS
AD_SC_SOS2
Q9706 2SK062000L
Q9708 2SD0601A0L
Q9709 2SD0601A0L
Q9714 2SD0601A0L
Q9715 2SD0601A0L
Q9716 2SD0601A0L
D9730 MA3X152K0L
D9769 MA3X152K0L
D9771 MA3X152K0L
D9723 MAZ30620ML
D9720 MAZ30620ML
D9724 MA2J11100L
D9719 MAZ30620ML
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
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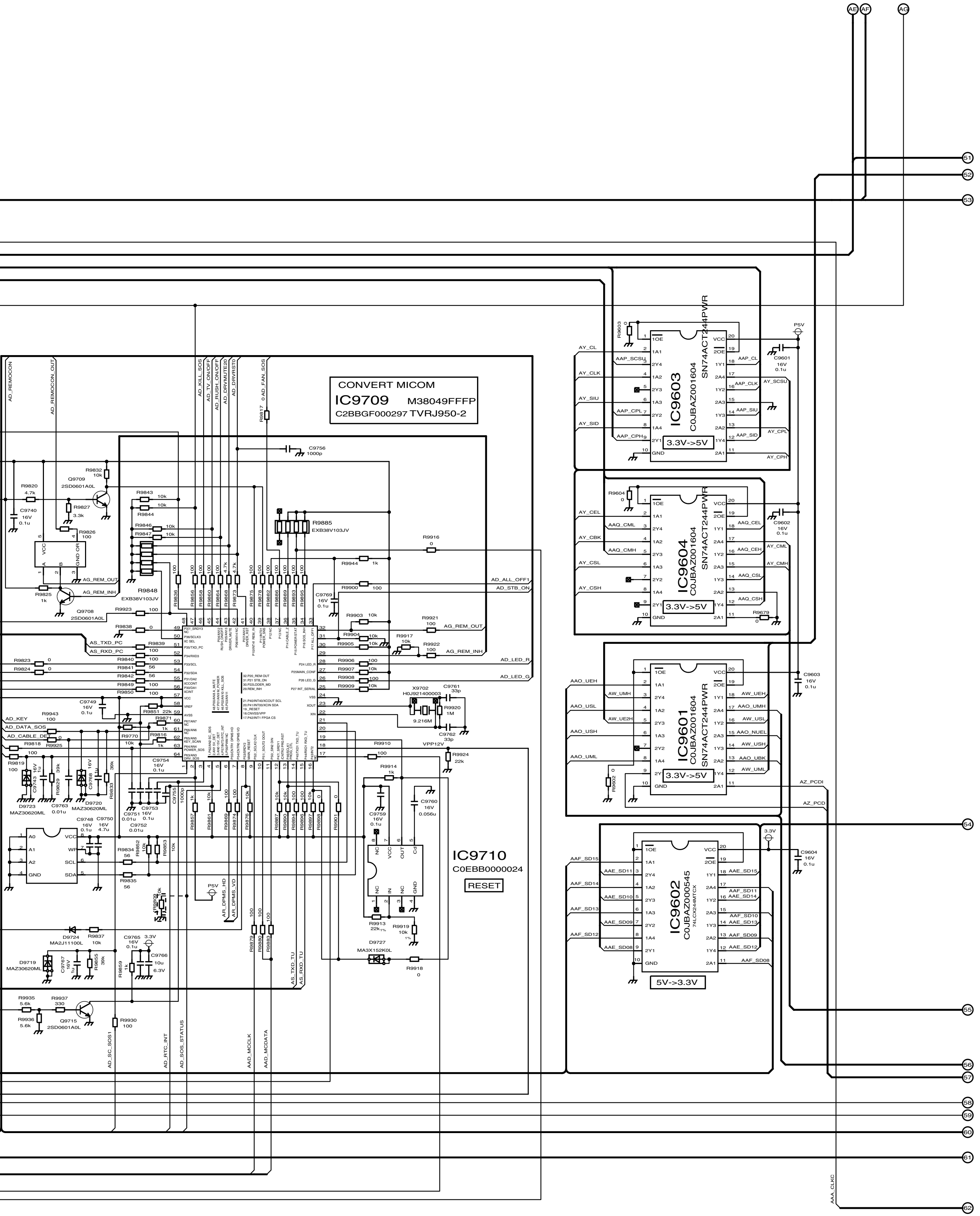
31
32
33

TH-42PA20U D-Board(7of11)Schematic Diagram

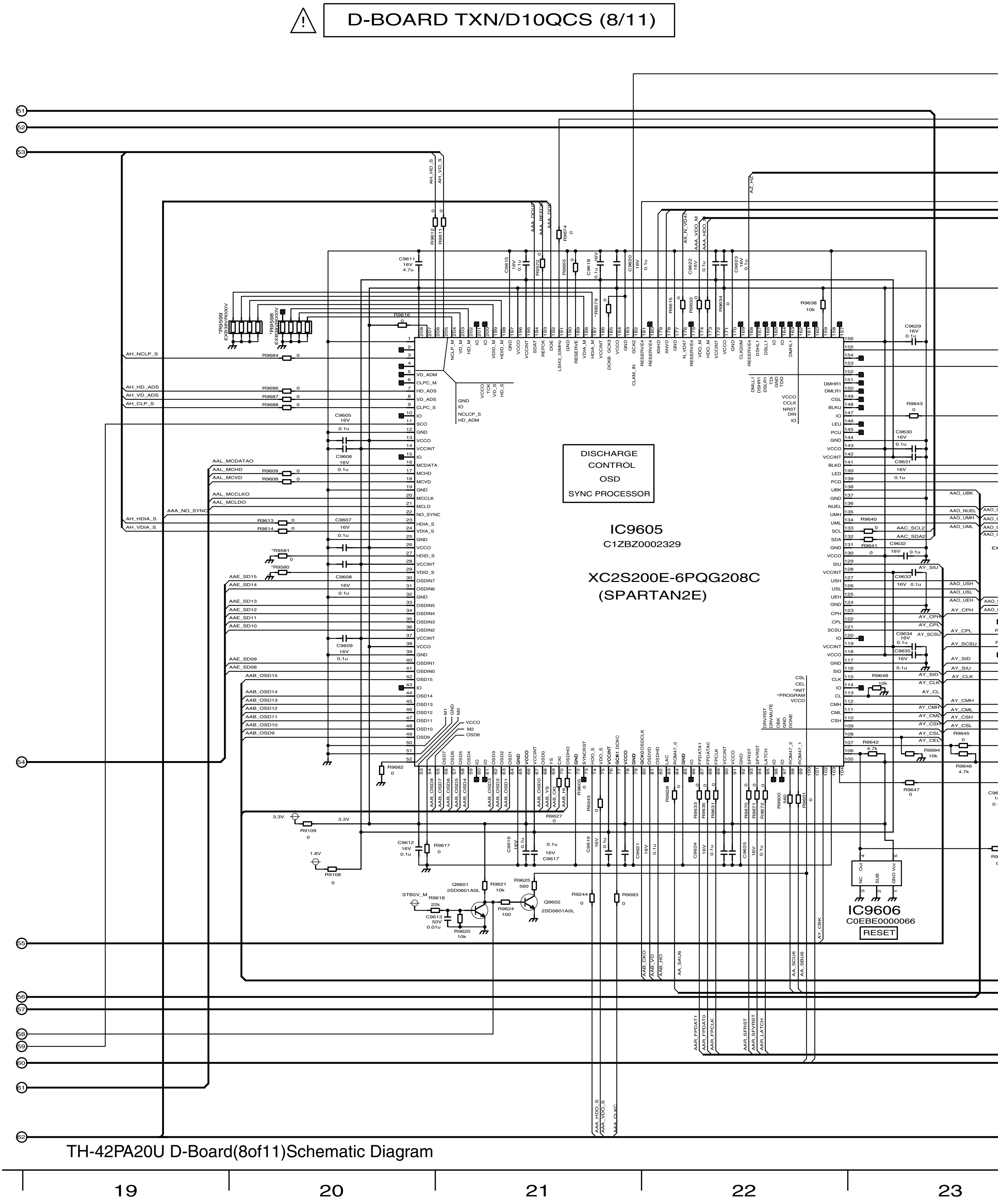
10
11
12
13
14


CONVERT MICOM
IC9709
M38049FFFP
C2BBGF000297 TVRJ950-2
IC9710
C0EBB0000024
RESET
IC9603
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9604
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9601
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9602
C0JBAZ000545
74LCX244MTCX
5V->3.3V
R9885
EXB38V103JV
R9848
EXB38V103JV
X9702
H0J921400003
9.216M
Q9709
2SD0601A0L
Q9708
2SD0601A0L
Q9715
2SD0601A0L
D9723
MAZ30620ML
D9720
MAZ30620ML
D9719
MAZ30620ML
D9724
MA2J11100L
D9727
MA3X152K0L
AD_REMOCON
AD_REMOCON_OUT
AD_KILL_SOS
AD_TV_ON/OFF
AD_PUSH_ON/OFF
AD_DRVMUTE20
AD_DRVRST0
AD_FAN_SOS
AG_REM_OUT
AG_REM_INH
AS_TXD_PC
AS_RXD_PC
AD_KEY
AD_DATA_SOS
AD_CABLE_DE
AD_ALL_OFF1
AD_STB_ON
AD_LED_R
AD_LED_G
VPP12V
AR_DPMS_HD
AR_DPMS_VD
AS_TXD_TU
AS_RXD_TU
AD_SC_SOS1
AD_RTC_INT
AD_SOS_STATUS
AAD_MCCLK
AAD_MCDATA
AAA_CLKC
AY_CL
AY_CLK
AY_SIU
AY_SID
AY_CEL
AY_CBK
AY_CSL
AY_CSH
AAO_UEH
AAO_USL
AAO_USH
AAO_UML
AAF_SD15
AAF_SD14
AAF_SD13
AAF_SD12
AZ_PCDI
AZ_PCD
P5V
3.3V
AE
AF
AG
51
52
53
54
55
56
57
58
59
60
61
62

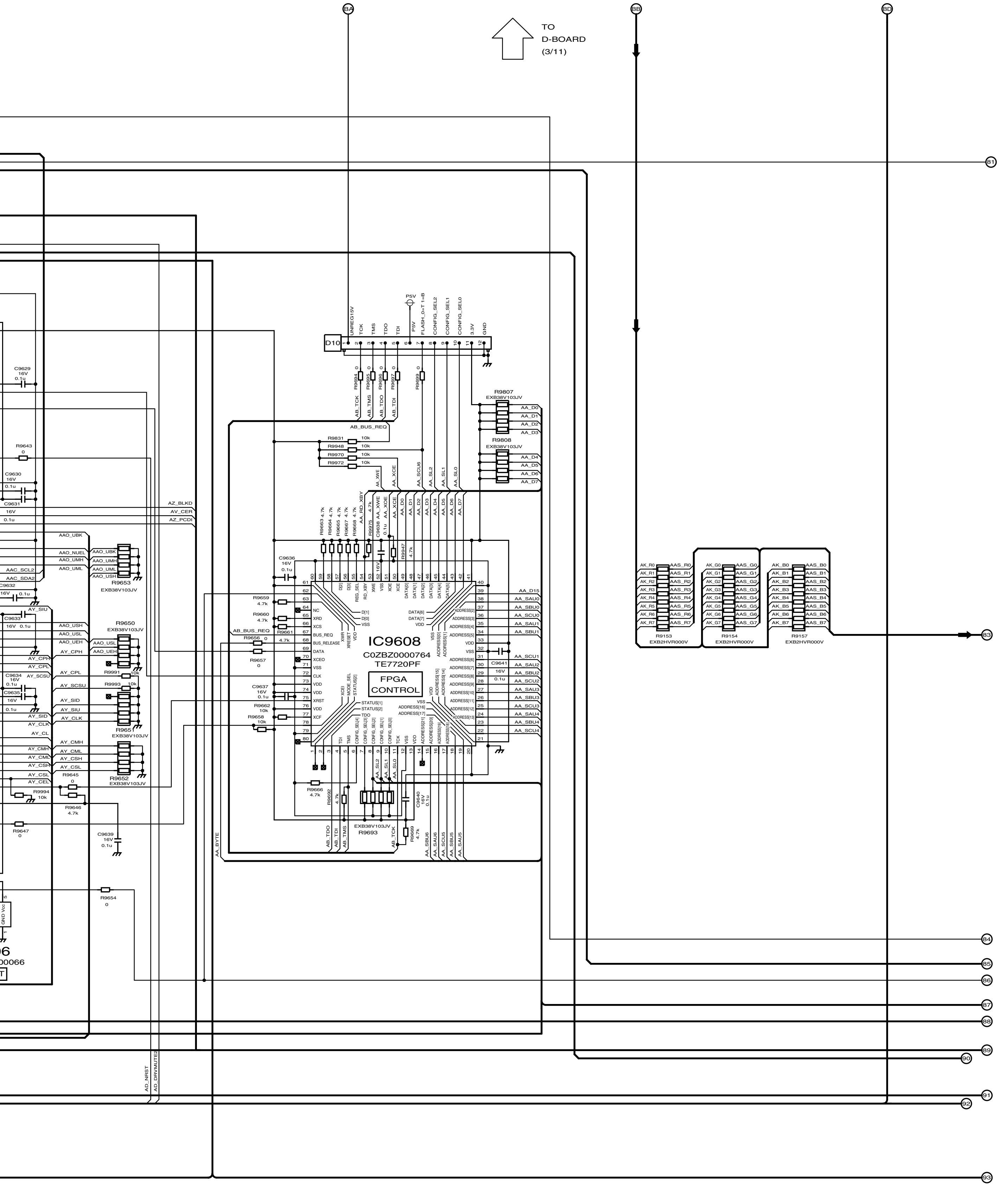
TH-42PA20U D-Board(7of11)Schematic Diagram

14 15 16 17 18

14.31. D-Board (8 of 11) Schematic Diagram


D-BOARD TXN/D10QCS (8/11)
DISCHARGE
CONTROL
OSD
SYNC PROCESSOR
IC9605
C1ZBZ0002329
XC2S200E-6PQG208C
(SPARTAN2E)
IC9606
C0EBE0000066
RESET
Q9601
2SD0601A0L
Q9602
2SD0601A0L
STB5V_M
3.3V
1.8V
51
52
53
54
55
56
57
58
59
60
61
62
19
20
21
22
23

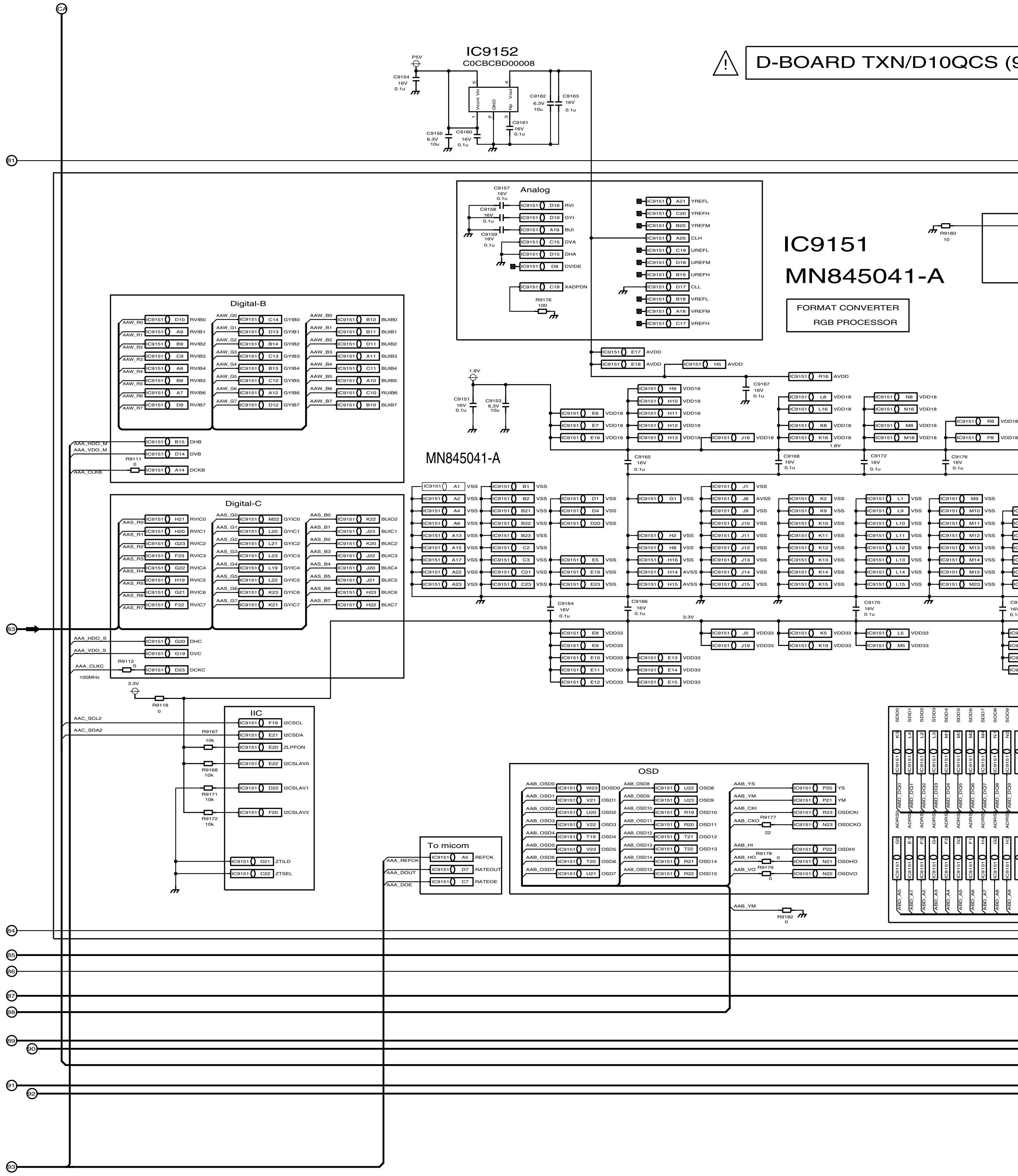
TH-42PA20U D-Board(8of11)Schematic Diagram


TO
D-BOARD
(3/11)
BA
BB
BD
D10
UNREG15V
TCK
TMS
TDO
TDI
P5V
FLASH_0=T 1=B
CONFIG_SEL2
CONFIG_SEL1
CONFIG_SEL0
3.3V
GND
R9807
EXB38V103JV
R9808
EXB38V103JV
AA_D0
AA_D1
AA_D2
AA_D3
AA_D4
AA_D5
AA_D6
AA_D7
AB_TCK
AB_TMS
AB_TDO
AB_TDI
AB_BUS_REQ
R9831
R9948
R9970
R9972
10k
AA_XWE
AA_XCE
AA_SCU6
AA_SL2
AA_SL1
AA_SL0
AA_RD_XBY
IC9608
C0ZBZ0000764
TE7720PF
FPGA
CONTROL
C9636
16V
0.1u
R9659
4.7k
R9660
4.7k
R9661
R9656
R9657
C9637
R9662
10k
R9658
10k
R9666
4.7k
R9692
R9693
EXB38V103JV
C9640
R9669
C9641
AA_D15
AA_SAU0
AA_SBU0
AA_SCU0
AA_SAU1
AA_SBU1
AA_SCU1
AA_SAU2
AA_SBU2
AA_SCU2
AA_SAU3
AA_SBU3
AA_SCU3
AA_SAU4
AA_SBU4
AA_SCU4
AA_SBU6
AA_SAU6
AA_SCU5
AA_SBU5
AA_SAU5
AB_TDO
AB_TDI
AB_TMS
AB_TCK
AA_BYTE
AD_NRST
AD_DRVMUTE2
R9153
EXB2HVR000V
R9154
EXB2HVR000V
R9157
EXB2HVR000V
AK_R0
AK_R1
AK_R2
AK_R3
AK_R4
AK_R5
AK_R6
AK_R7
AAS_R0
AAS_R1
AAS_R2
AAS_R3
AAS_R4
AAS_R5
AAS_R6
AAS_R7
AK_G0
AK_G1
AK_G2
AK_G3
AK_G4
AK_G5
AK_G6
AK_G7
AAS_G0
AAS_G1
AAS_G2
AAS_G3
AAS_G4
AAS_G5
AAS_G6
AAS_G7
AK_B0
AK_B1
AK_B2
AK_B3
AK_B4
AK_B5
AK_B6
AK_B7
AAS_B0
AAS_B1
AAS_B2
AAS_B3
AAS_B4
AAS_B5
AAS_B6
AAS_B7
C9629
C9630
C9631
C9632
C9633
C9634
C9635
C9639
R9643
R9645
R9646
R9647
R9654
R9994
R9650
R9653
R9652
R9991
R9993
AZ_BLKD
AV_CER
AZ_PCDI
AAO_UBK
AAO_NUEL
AAO_UMH
AAO_UML
AAO_USH
AAC_SCL2
AAC_SDA2
AY_SIU
AY_CPH
AY_CPL
AY_SCSU
AY_SID
AY_CLK
AY_CL
AY_CMH
AY_CML
AY_CSH
AY_CSL
AY_CEL
81
83
84
85
86
87
88
89
90
91
92
93

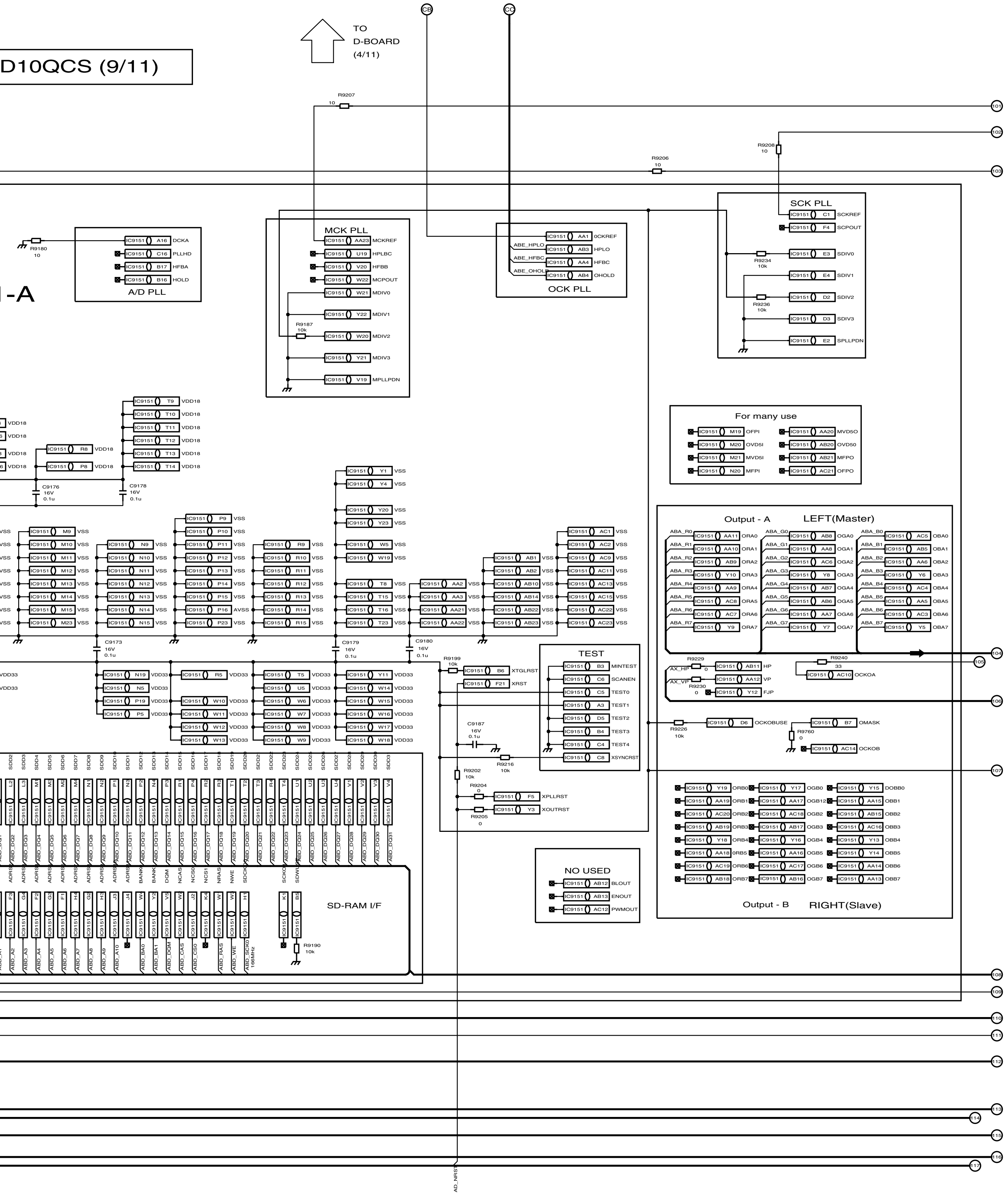
TH-42PA20U D-Board(8of11)Schematic Diagram

23	24	25	26	27

14.32. D-Board (9 of 11) Schematic Diagram


IC9152
C0CBCBD00008
P5V
⚠ D-BOARD TXN/D10QCS (9
IC9151
MN845041-A
FORMAT CONVERTER
RGB PROCESSOR
Analog
Digital-B
Digital-C
IIC
OSD
To micom
MN845041-A
AAA_HDO_M
AAA_VDO_M
AAA_CLKB
AAA_HDO_S
AAA_VDO_S
AAA_CLKC
100MHz
AAC_SCL2
AAC_SDA2
AAA_REFCK
AAA_DOUT
AAA_DOE
3.3V
1.8V
R9111
R9112
R9118
R9167
R9168
R9171
R9172
R9176
R9177
R9178
R9179
R9180
R9182
C9151
C9153
C9154
C9156
C9157
C9158
C9159
C9160
C9161
C9162
C9163
C9164
C9165
C9166
C9167
C9168
C9170
C9172
C9176
28
29
30
31
32

TH-42PA20U D-Board(9of11)Schematic Diagram

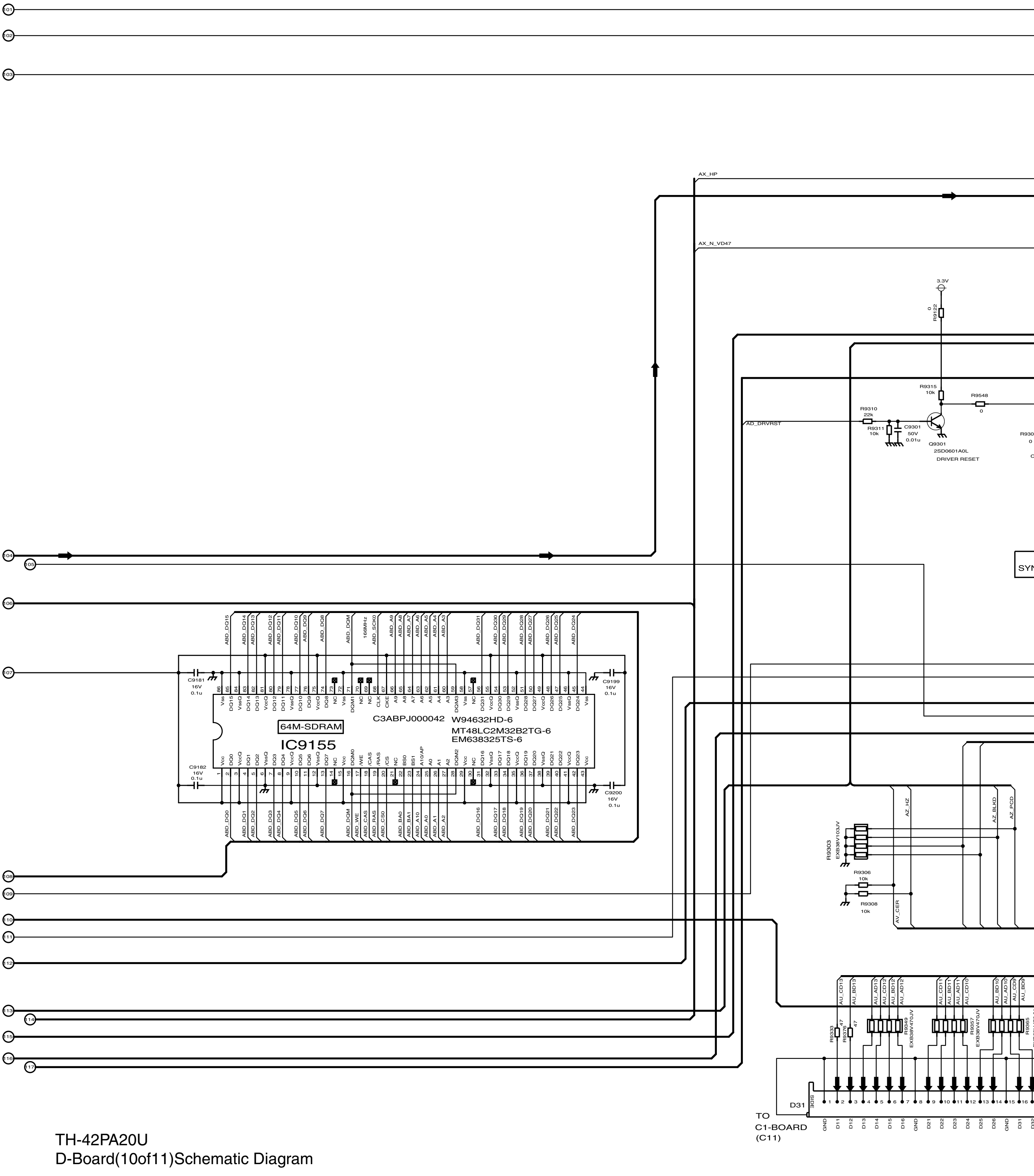

D10QCS (9/11)
TO
D-BOARD
(4/11)
-A
A/D PLL
MCK PLL
OCK PLL
SCK PLL
For many use
Output - A
LEFT(Master)
TEST
NO USED
Output - B
RIGHT(Slave)
SD-RAM I/F
AD_NRST

TH-42PA20U

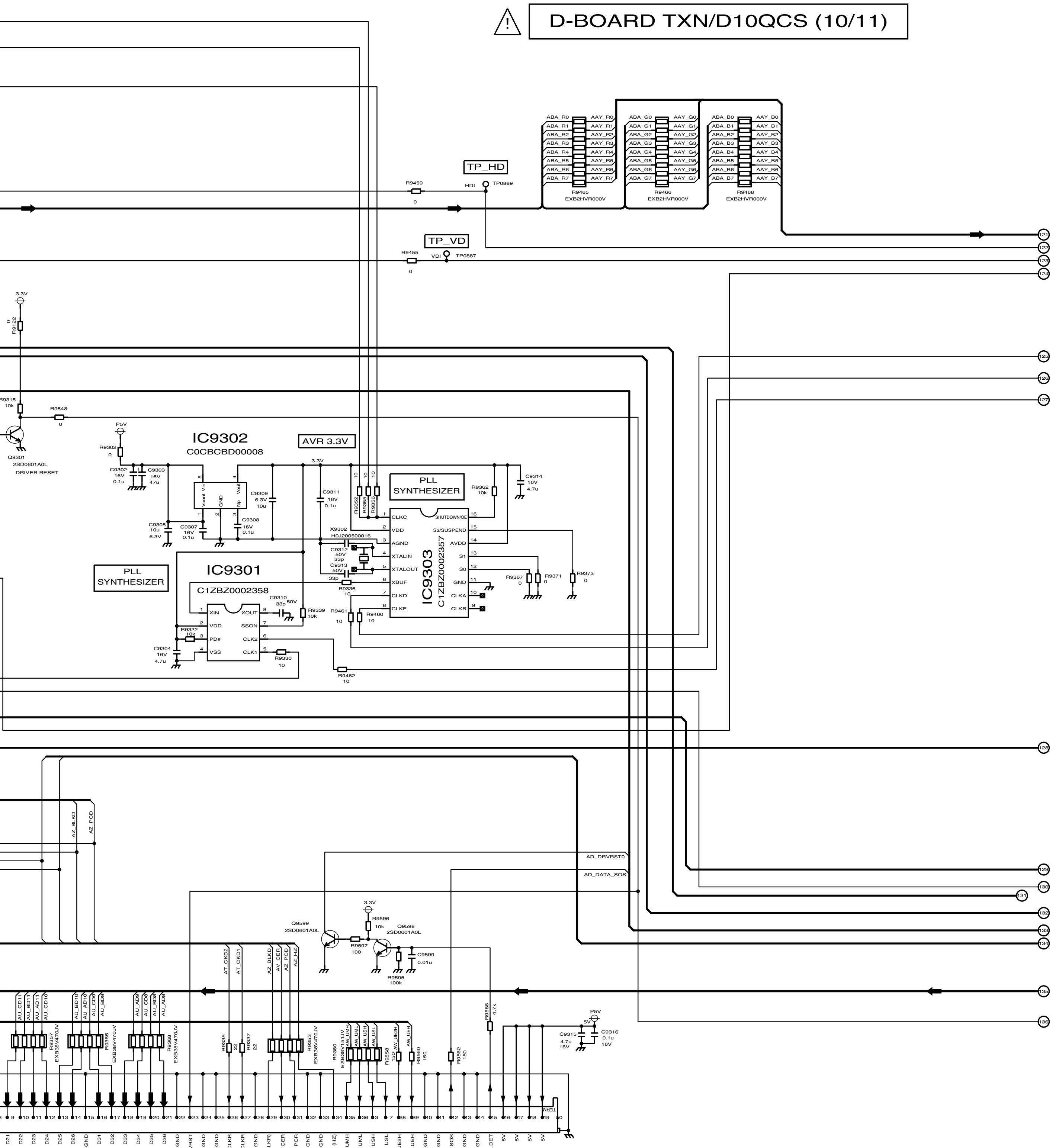
D-Board(9of11)Schematic Diagram

32
33
34
35
36

14.33. D-Board (10 of 11) Schematic Diagram


AX_HP
AX_N_VD47
3.3V
R9122
0
R9315
10k
R9548
0
R9310
22k
R9311
10k
C9301
50V
0.01u
Q9301
2SD0601A0L
DRIVER RESET
AD_DRVRST
64M-SDRAM
IC9155
C3ABPJ000042
W94632HD-6
MT48LC2M32B2TG-6
EM638325TS-6
C9181
16V
0.1u
C9182
16V
0.1u
C9199
16V
0.1u
C9200
16V
0.1u
R9303
EXB38V103JV
R9306
10k
R9308
10k
AV_CER
AZ_HZ
AZ_BLKD
AZ_PCD
D31
TO
C1-BOARD
(C11)

TH-42PA20U
D-Board(10of11)Schematic Diagram

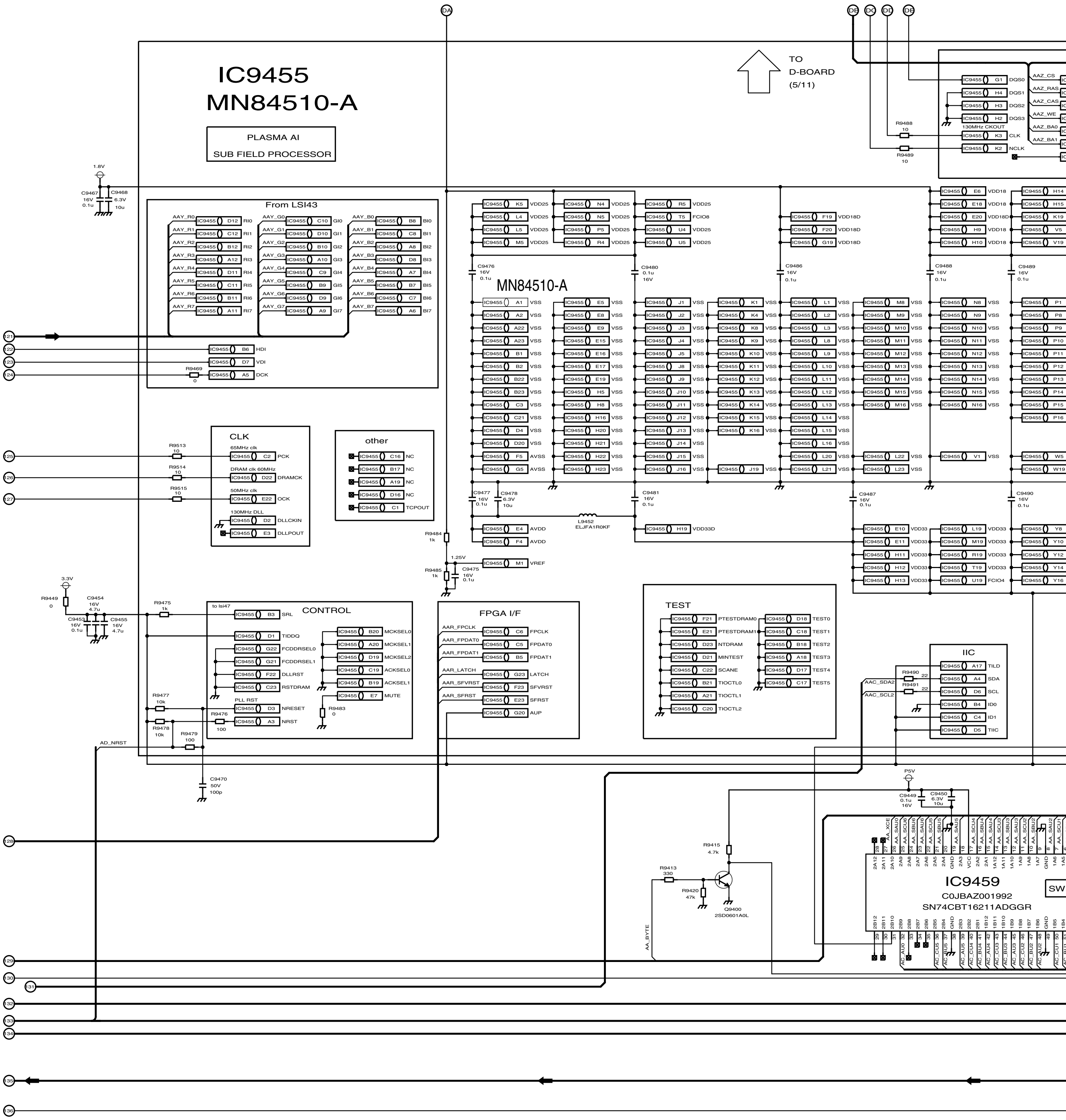


D-BOARD TXN/D10QCS (10/11)
TP_HD
TP_VD
R9459
R9455
HDI
VDI
TP0889
TP0887
R9465
EXB2HVR000V
R9466
EXB2HVR000V
R9468
EXB2HVR000V
ABA_R0
AAY_R0
ABA_G0
AAY_G0
ABA_B0
AAY_B0
IC9302
C0CBCBD00008
AVR 3.3V
IC9301
C1ZBZ0002358
PLL SYNTHESIZER
IC9303
C1ZBZ0002357
PLL SYNTHESIZER
X9302
H0J200500016
Q9301
2SD0601A0L
DRIVER RESET
Q9599
2SD0601A0L
Q9598
2SD0601A0L
R9122
R9315
R9548
R9302
R9336
R9339
R9330
R9322
R9461
R9460
R9462
R9362
R9367
R9371
R9373
R9596
R9597
R9595
R9586
C9302
C9303
C9305
C9307
C9308
C9309
C9310
C9311
C9312
C9313
C9314
C9304
C9599
C9315
C9316
3.3V
P5V
AD_DRVRST0
AD_DATA_SOS
CLKC
VDD
AGND
XTALIN
XTALOUT
XBUF
CLKD
CLKE
SHUTDOWN/OE
S2/SUSPEND
AVDD
S1
S0
GND
CLKA
CLKB
XIN
XOUT
SSON
PD#
CLK2
VSS
CLK1
D21
D22
D23
D24
D25
D26
GND
D31
D32
D33
D34
D35
D36
DRVRST
NCLKR
CLKR
(BLKR)
CER
PCR
(HZ)
UMH
UML
USH
USL
UE2H
UEH
SOS
FPC_DET
5V
TERM
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136

TH-42PA20U
D-Board(10of11)Schematic Diagram

41 42 43 44 45

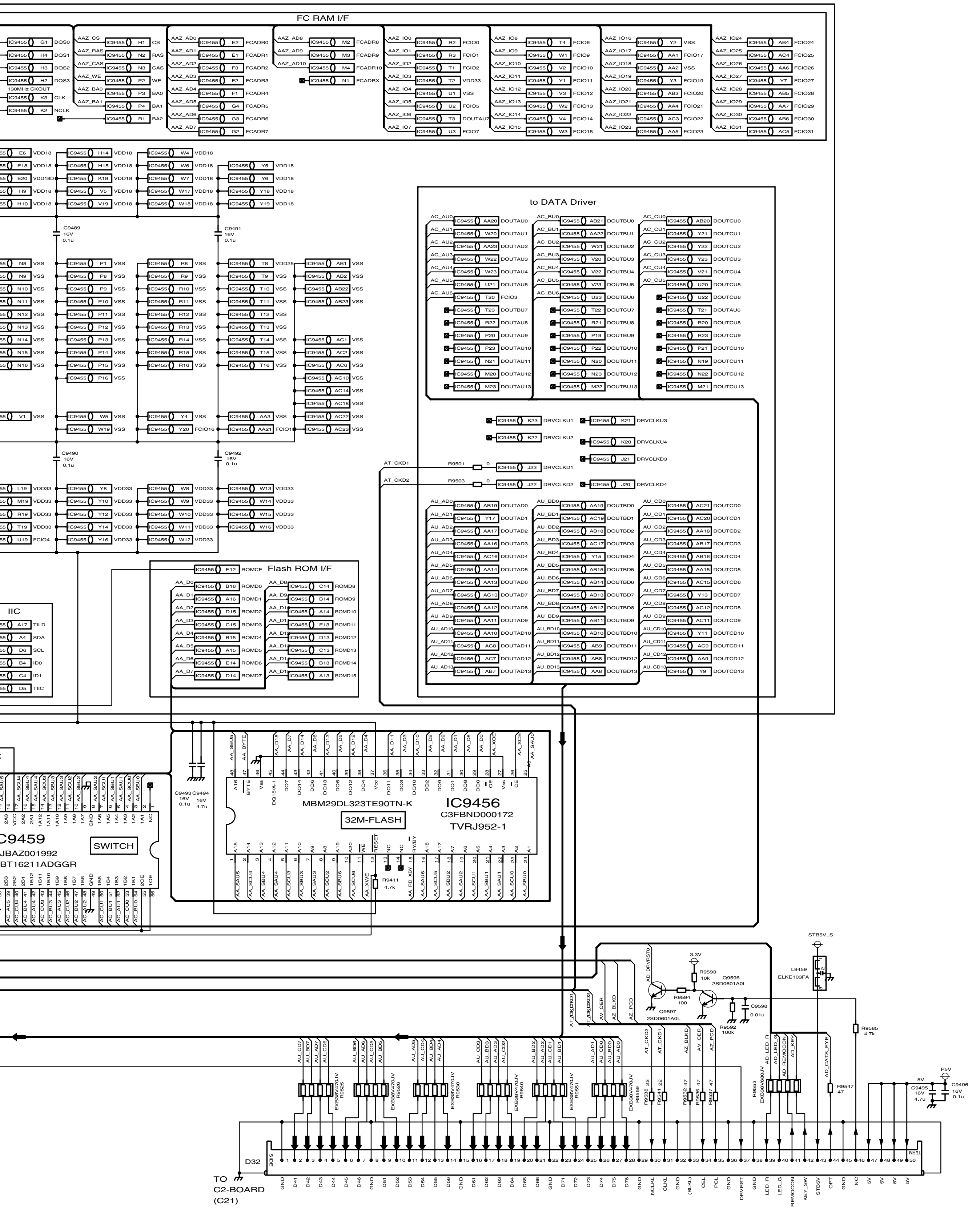
14.34. D-Board (11 of 11) Schematic Diagram


IC9455
MN84510-A
PLASMA AI
SUB FIELD PROCESSOR
TO
D-BOARD
(5/11)
From LSI43
MN84510-A
CLK
65MHz clk
DRAM clk 60MHz
50MHz clk
130MHz DLL
other
CONTROL
to lsi47
FPGA I/F
TEST
IIC
130MHz CKOUT
1.8V
3.3V
1.25V
P5V
AD_NRST
AA_BYTE
AAC_SDA2
AAC_SCL2
L9452
ELJFA1R0KF
Q9400
2SD0601A0L
IC9459
C0JBAZ001992
SN74CBT16211ADGGR
SW

⚠ D-BOARD TXN/D10QCS (11/11)

TH-42PA20U
D-Board(11of11)Schematic Diagram

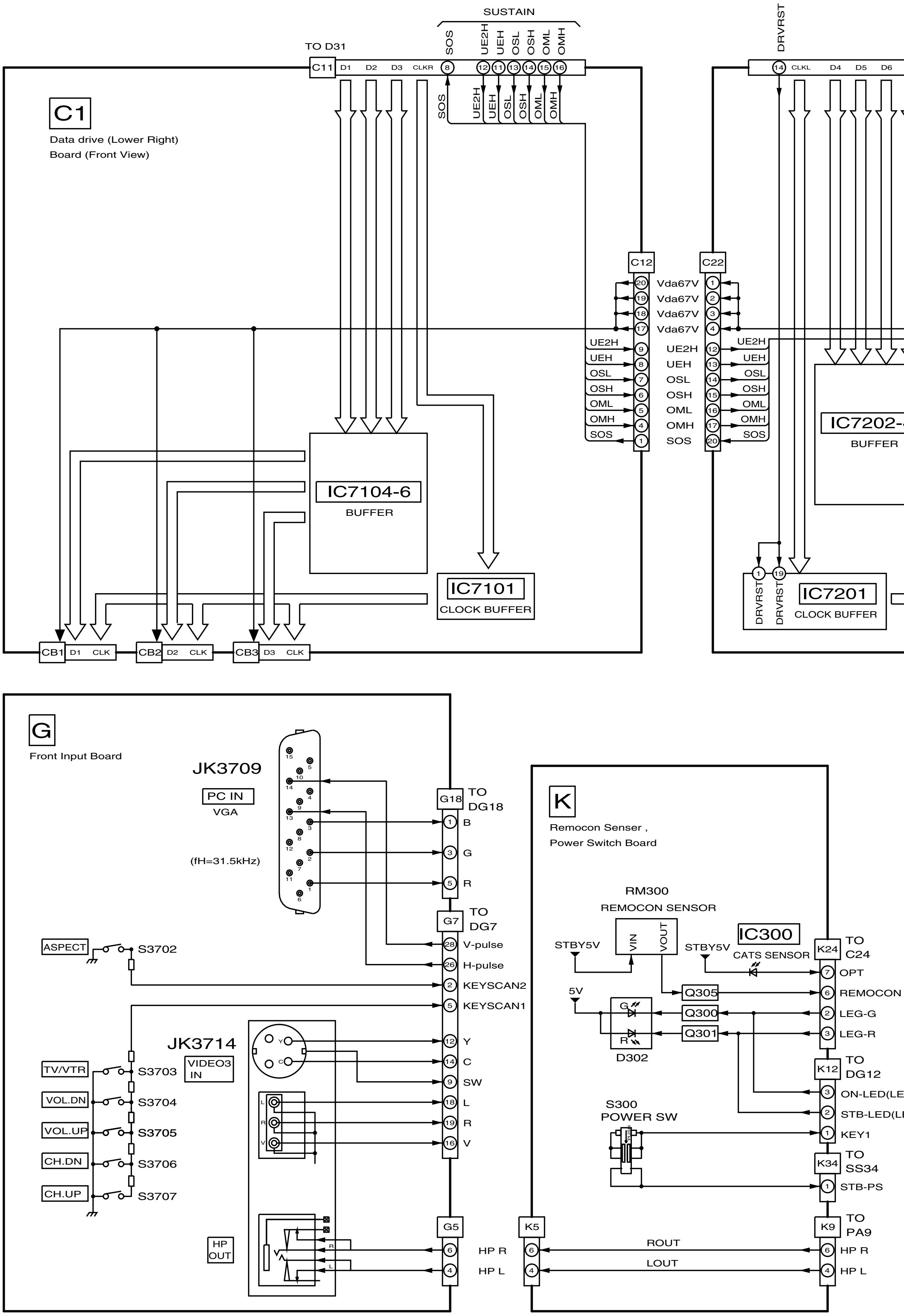
46	47	48	49	50


FC RAM I/F
to DATA Driver
Flash ROM I/F
IIC
IC9456
MBM29DL323TE90TN-K
C3FBND000172
TVRJ952-1
32M-FLASH
C9459
JBAZ001992
BT16211ADGGR
SWITCH
STB5V_S
L9459
ELKE103FA
Q9596
2SD0601A0L
Q9597
2SD0601A0L
D32
TO
C2-BOARD
(C21)

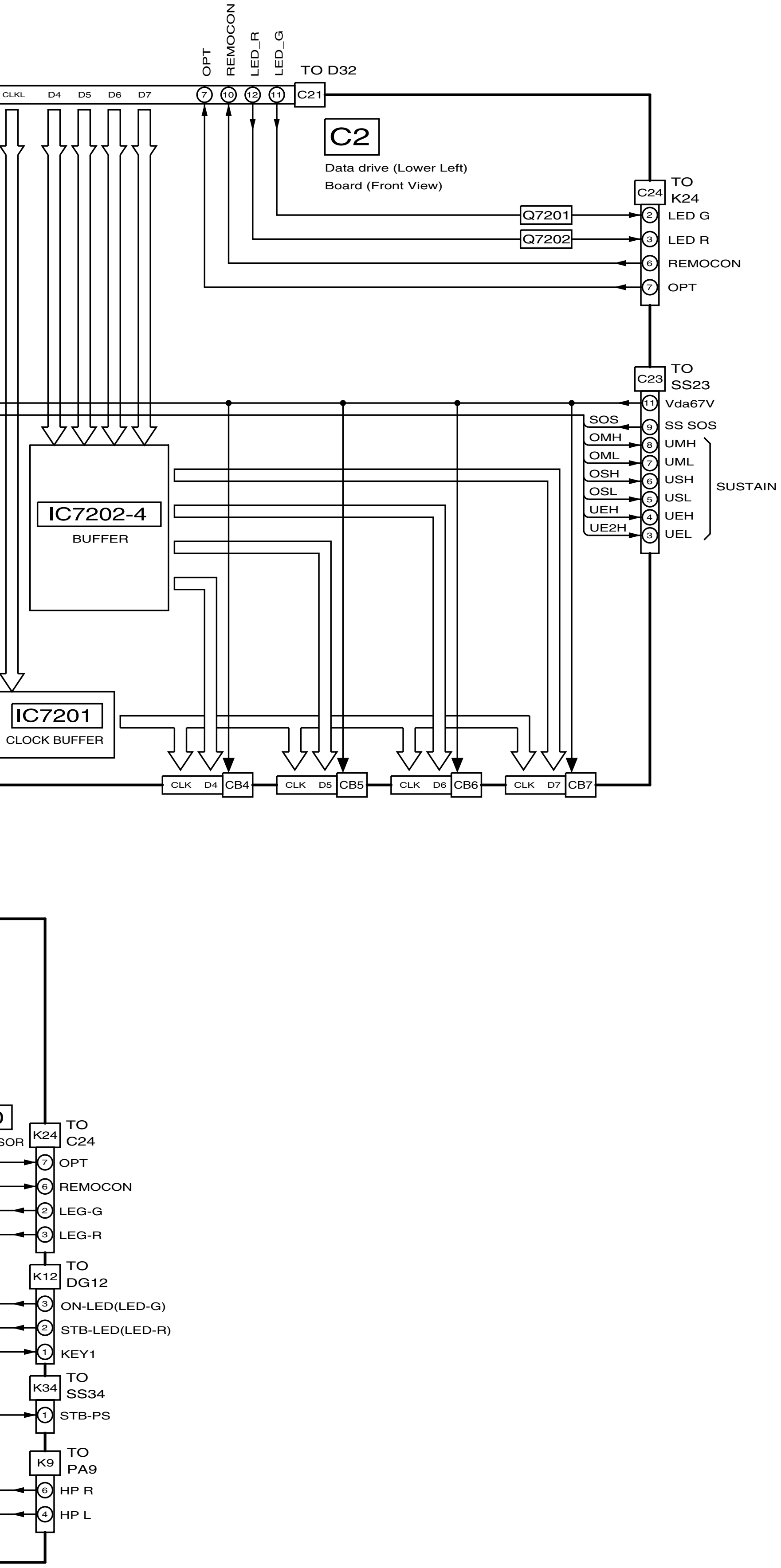
TH-42PA20U D-Board(11of11)Schematic Diagram

50 51 52 53 54

14.35. C1, C2, G and K-Board Block Diagram

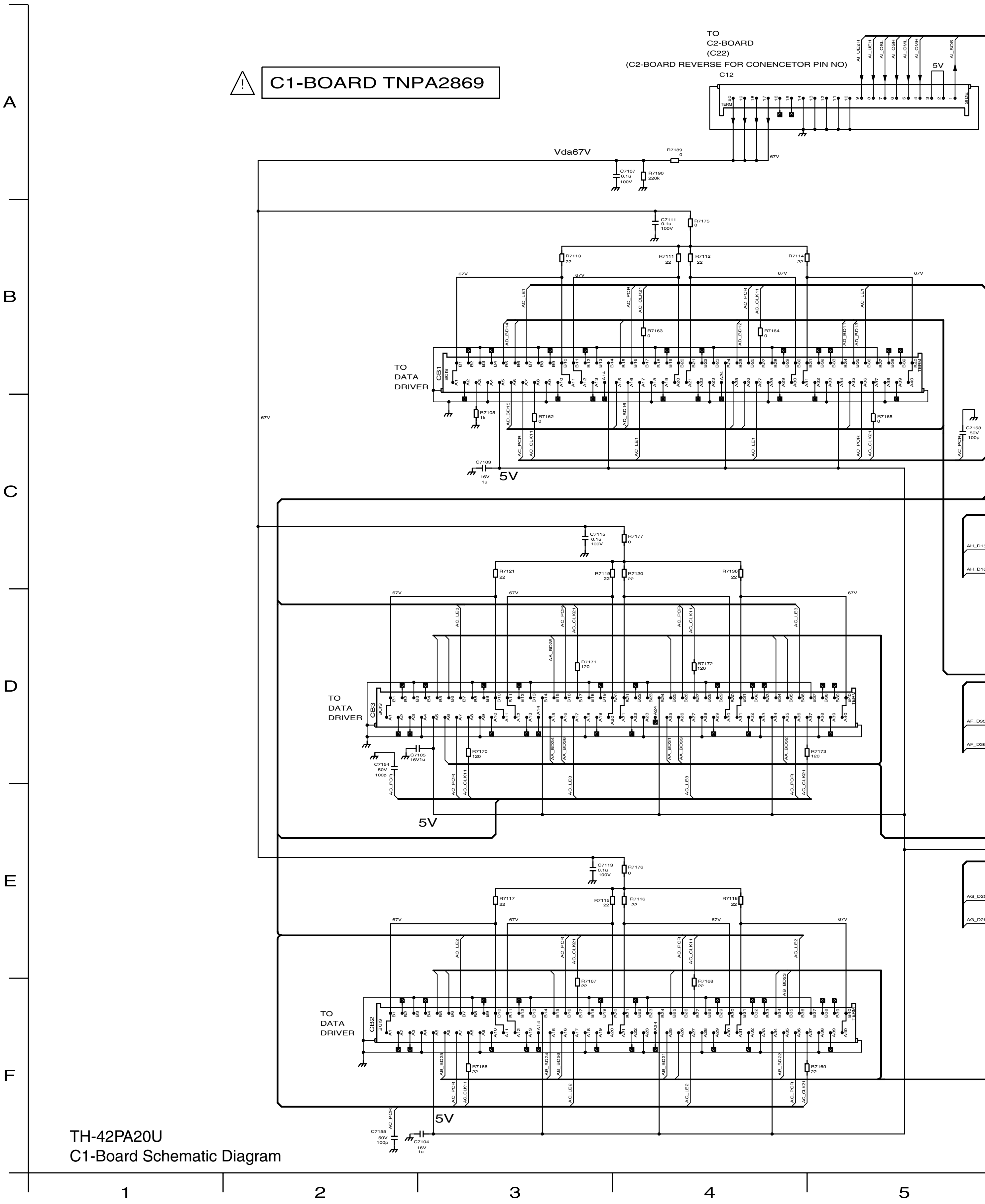

SUSTAIN
TO D31
C11
D1
D2
D3
CLKR
SOS
UE2H
UEH
OSL
OSH
OML
OMH
DRVRST
CLKL
D4
D5
D6
C1
Data drive (Lower Right)
Board (Front View)
C12
C22
Vda67V
Vda67V
Vda67V
Vda67V
UE2H
UEH
OSL
OSH
OML
OMH
SOS
IC7104-6
BUFFER
IC7101
CLOCK BUFFER
IC7202-
BUFFER
IC7201
CLOCK BUFFER
CB1
CB2
CB3
CLK
G
Front Input Board
JK3709
PC IN
VGA
(fH=31.5kHz)
G18
TO
DG18
B
G
R
G7
TO
DG7
V-pulse
H-pulse
KEYSCAN2
KEYSCAN1
ASPECT
S3702
JK3714
VIDEO3
IN
TV/VTR
S3703
VOL.DN
S3704
VOL.UP
S3705
CH.DN
S3706
CH.UP
S3707
Y
C
SW
L
R
V
HP
OUT
G5
HP R
HP L
K
Remocon Senser ,
Power Switch Board
RM300
REMOCON SENSOR
STBY5V
VIN
VOUT
STBY5V
IC300
CATS SENSOR
K24
TO
C24
OPT
REMOCON
LEG-G
LEG-R
5V
Q305
Q300
Q301
D302
K12
TO
DG12
ON-LED(LE
STB-LED(LE
KEY1
S300
POWER SW
K34
TO
SS34
STB-PS
K5
K9
TO
PA9
ROUT
LOUT
HP R
HP L

TH-42PA20U
C1,C2,G and K-Board Block Diagram

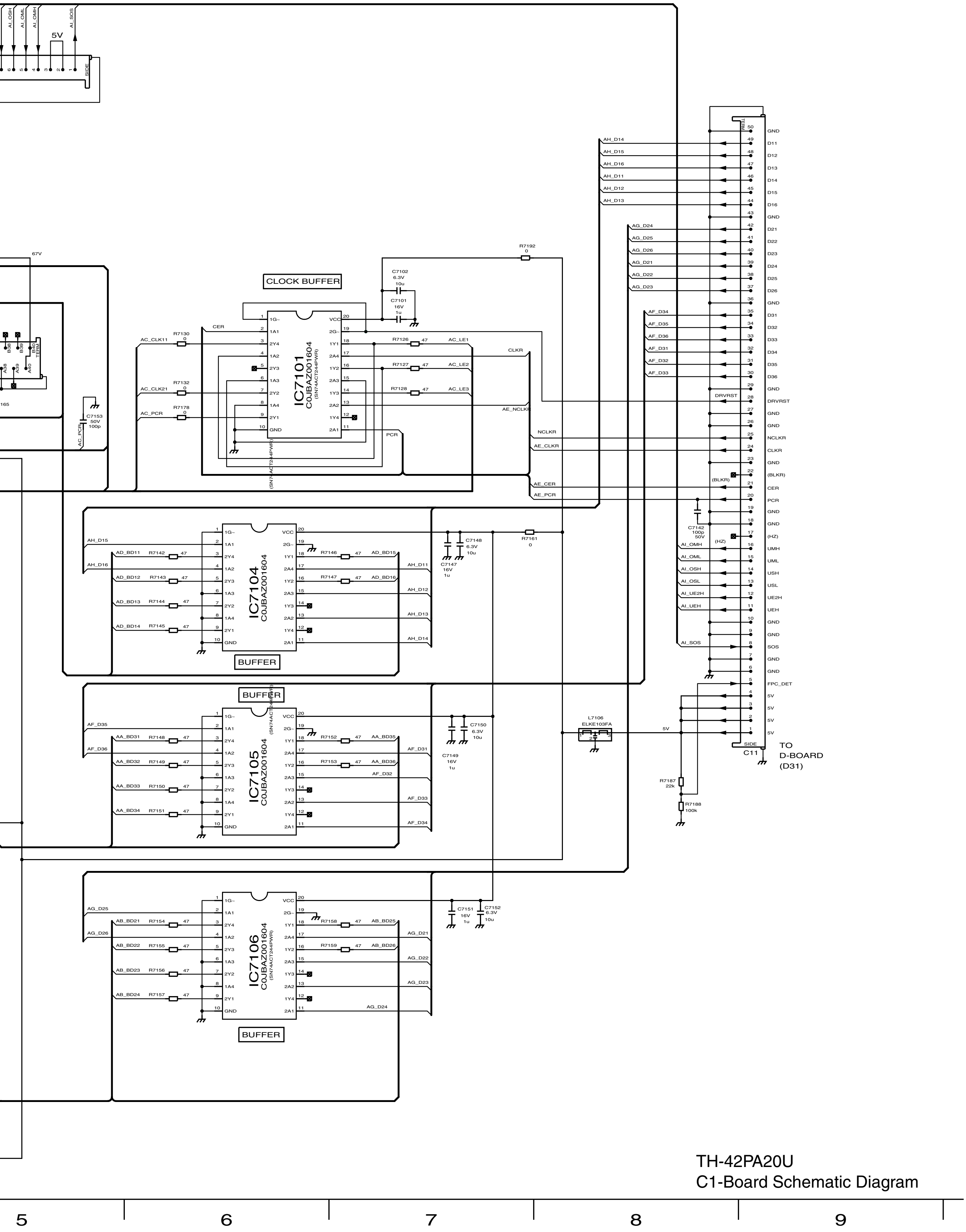

OPT
REMOCON
LED_R
LED_G
TO D32
CLKL
D4
D5
D6
D7
7
10
12
11
C21
C2
Data drive (Lower Left)
Board (Front View)
C24
TO
K24
Q7201
Q7202
2 LED G
3 LED R
6 REMOCON
7 OPT
C23
TO
SS23
11 Vda67V
SOS
9 SS SOS
OMH
8 UMH
OML
7 UML
OSH
6 USH
OSL
5 USL
UEH
4 UEH
UE2H
3 UEL
SUSTAIN
IC7202-4
BUFFER
IC7201
CLOCK BUFFER
CLK D4 CB4
CLK D5 CB5
CLK D6 CB6
CLK D7 CB7
SOR
K24
TO
C24
7 OPT
6 REMOCON
2 LEG-G
3 LEG-R
K12
TO
DG12
3 ON-LED(LED-G)
2 STB-LED(LED-R)
1 KEY1
K34
TO
SS34
1 STB-PS
K9
TO
PA9
6 HP R
4 HP L

TH-42PA20U
C1,C2,G and K-Board Block Diagram

14.36. C1-Board Schematic Diagram

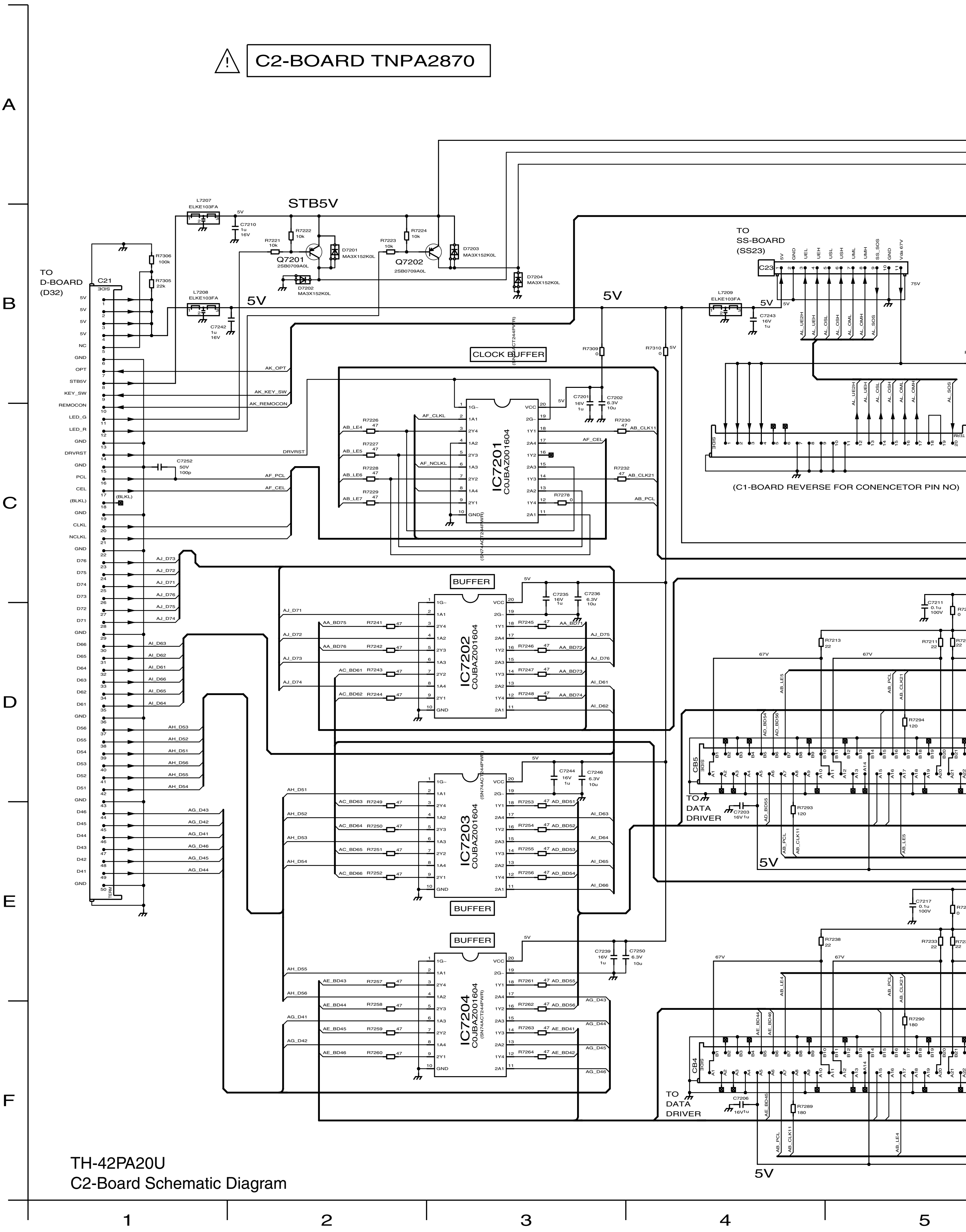

C1-BOARD TNPA2869
TO
C2-BOARD
(C22)
(C2-BOARD REVERSE FOR CONENCETOR PIN NO)
C12
AI_UE2H
AI_UEH
AI_OSL
AI_OSH
AI_OML
AI_OMH
AI_SOS
5V
TERM
SIDE
Vda67V
R7189
0
67V
C7107
0.1u
100V
R7190
220k
C7111
0.1u
100V
R7175
0
R7113
22
R7111
22
R7112
22
R7114
22
67V
AC_LE1
AC_PCR
AC_CLK21
AC_CLK11
AD_BD14
AD_BD12
AD_BD11
AD_BD13
AD_BD15
AD_BD16
R7163
0
R7164
0
TO
DATA
DRIVER
CB1
R7105
1k
R7162
0
R7165
0
C7153
50V
100p
C7103
16V
1u
5V
C7115
0.1u
100V
R7177
0
R7121
22
R7119
22
R7120
22
R7136
22
AC_LE3
AA_BD35
R7171
120
R7172
120
CB3
C7105
16V1u
C7154
50V
100p
R7170
120
R7173
120
AA_BD34
AA_BD36
AA_BD31
AA_BD33
AA_BD32
AH_D15
AH_D16
AF_D35
AF_D36
C7113
0.1u
100V
R7176
0
R7117
22
R7115
22
R7116
22
R7118
22
AC_LE2
AB_BD23
R7167
22
R7168
22
CB2
R7166
22
R7169
22
AB_BD25
AB_BD24
AB_BD26
AB_BD21
AB_BD22
AG_D25
AG_D26
C7155
50V
100p
C7104
16V
1u
A
B
C
D
E
F
1
2
3
4
5

TH-42PA20U
C1-Board Schematic Diagram

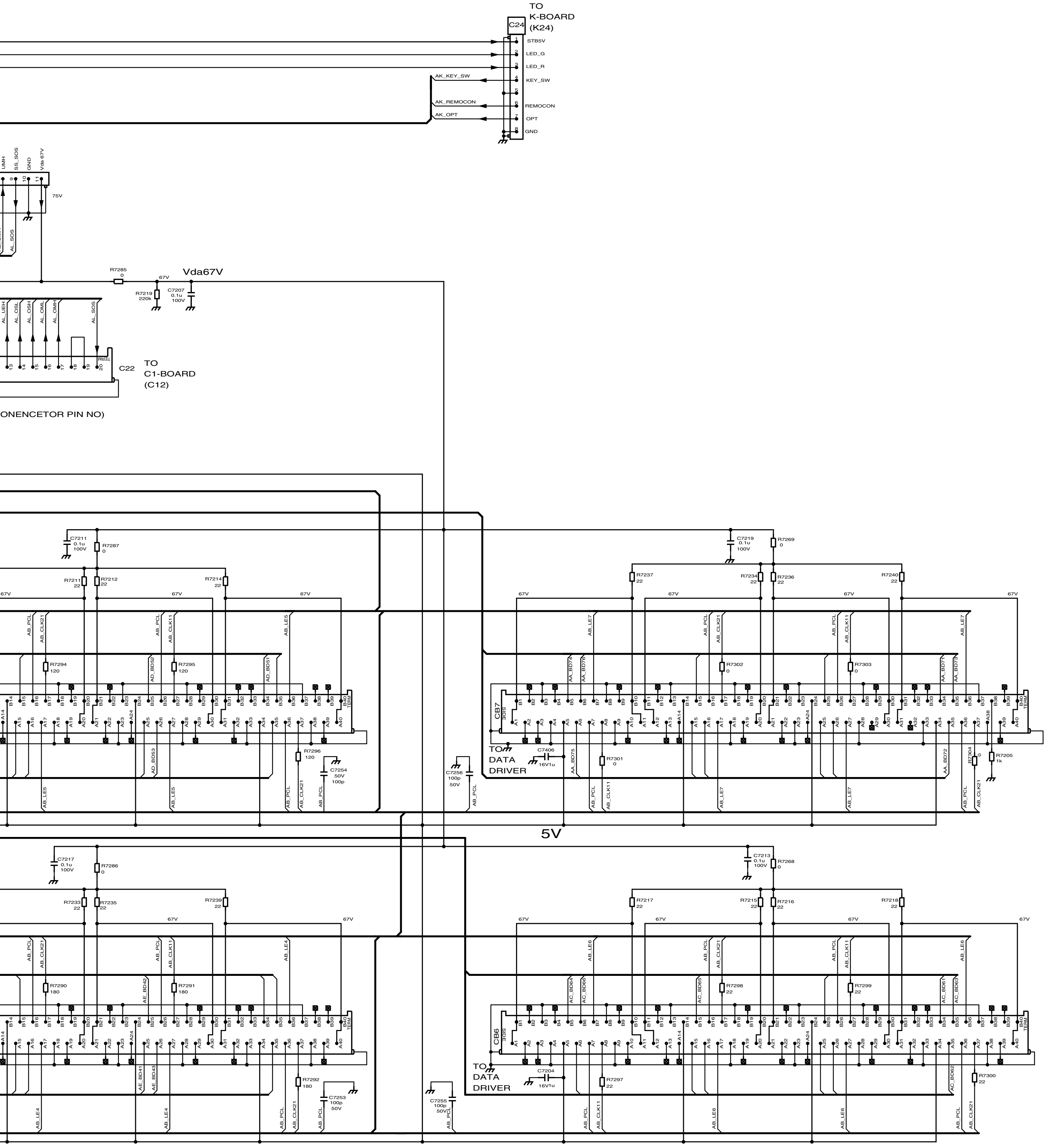

CLOCK BUFFER
IC7101
C0JBAZ001604
(SN74ACT244PWR)
IC7104
C0JBAZ001604
BUFFER
IC7105
C0JBAZ001604
(SN74ACT244PWR)
BUFFER
IC7106
C0JBAZ001604
(SN74ACT244PWR)
BUFFER
C11
TO
D-BOARD
(D31)
L7106
ELKE103FA
R7192
R7161
R7187
22k
R7188
100k
C7142
100p
50V
C7102
6.3V
10u
C7101
16V
1u
C7153
50V
100p
C7148
6.3V
10u
C7147
16V
1u
C7150
6.3V
10u
C7149
16V
1u
C7151
16V
1u
C7152
6.3V
10u
GND
D11
D12
D13
D14
D15
D16
D21
D22
D23
D24
D25
D26
D31
D32
D33
D34
D35
D36
DRVRST
NCLKR
CLKR
(BLKR)
CER
PCR
(HZ)
UMH
UML
USH
USL
UE2H
UEH
SOS
FPC_DET
5V
AH_D14
AH_D15
AH_D16
AH_D11
AH_D12
AH_D13
AG_D24
AG_D25
AG_D26
AG_D21
AG_D22
AG_D23
AF_D34
AF_D35
AF_D36
AF_D31
AF_D32
AF_D33
AC_CLK11
AC_CLK21
AC_PCR
AC_LE1
AC_LE2
AC_LE3
AE_NCLKR
AE_CLKR
AE_CER
AE_PCR
AI_OMH
AI_OML
AI_OSH
AI_OSL
AI_UE2H
AI_UEH
AI_SOS
5V
67V
5
6
7
8
9

TH-42PA20U
C1-Board Schematic Diagram

14.37. C2-Board Schematic Diagram

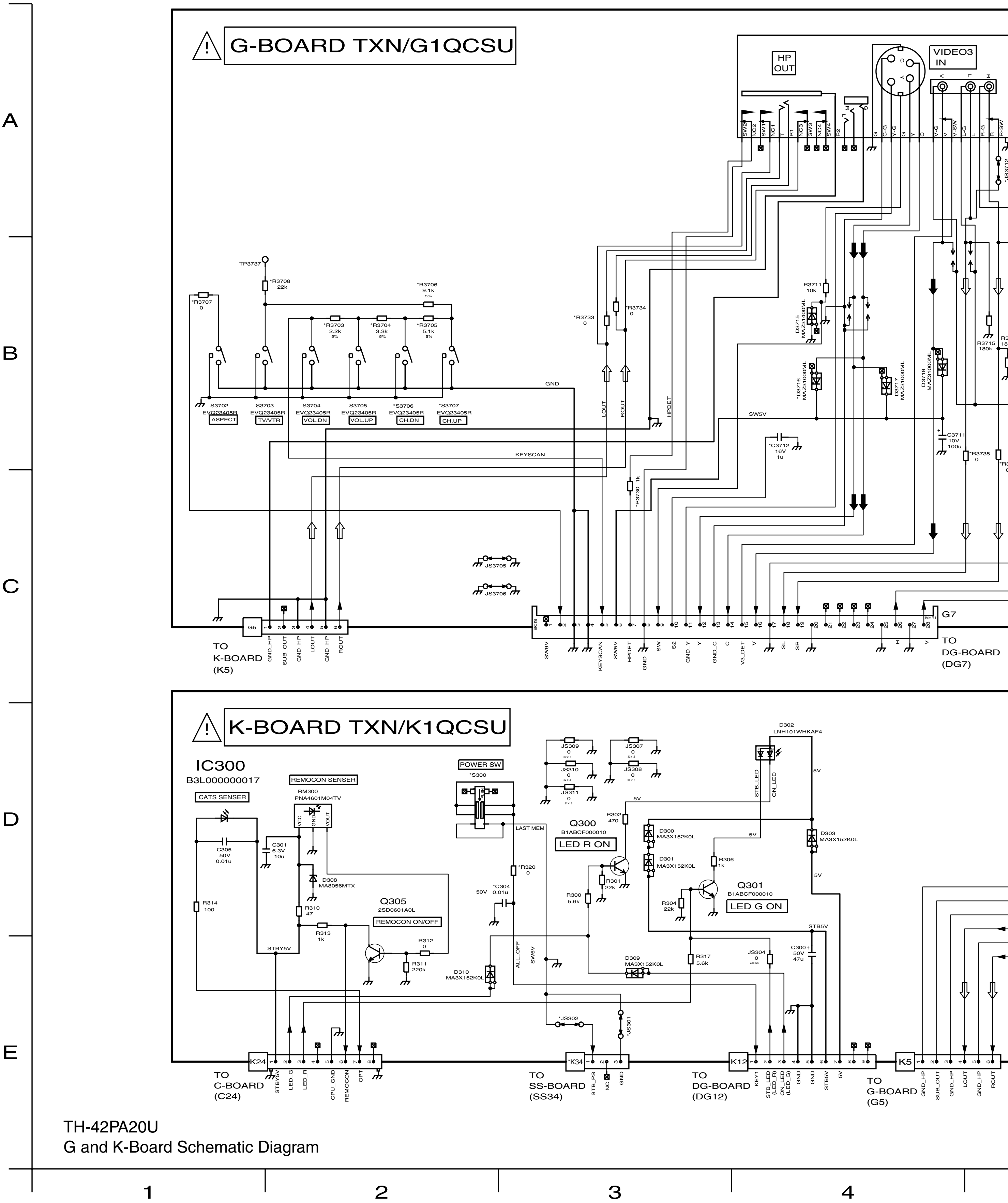

C2-BOARD TNPA2870
STB5V
5V
TO D-BOARD (D32)
C21
TO SS-BOARD (SS23)
C23
CLOCK BUFFER
IC7201 C0JBAZ001604
BUFFER
IC7202 C0JBAZ001604
IC7203 C0JBAZ001604
IC7204 C0JBAZ001604
(SN74ACT244PWR)
Q7201 2SB0709A0L
Q7202 2SB0709A0L
D7201 MA3X152K0L
D7202 MA3X152K0L
D7203 MA3X152K0L
D7204 MA3X152K0L
L7207 ELKE103FA
L7208 ELKE103FA
L7209 ELKE103FA
(C1-BOARD REVERSE FOR CONENCETOR PIN NO)
CB5
CB4
TO DATA DRIVER
TO DATA DRIVER
A
B
C
D
E
F
1
2
3
4
5

TH-42PA20U
C2-Board Schematic Diagram

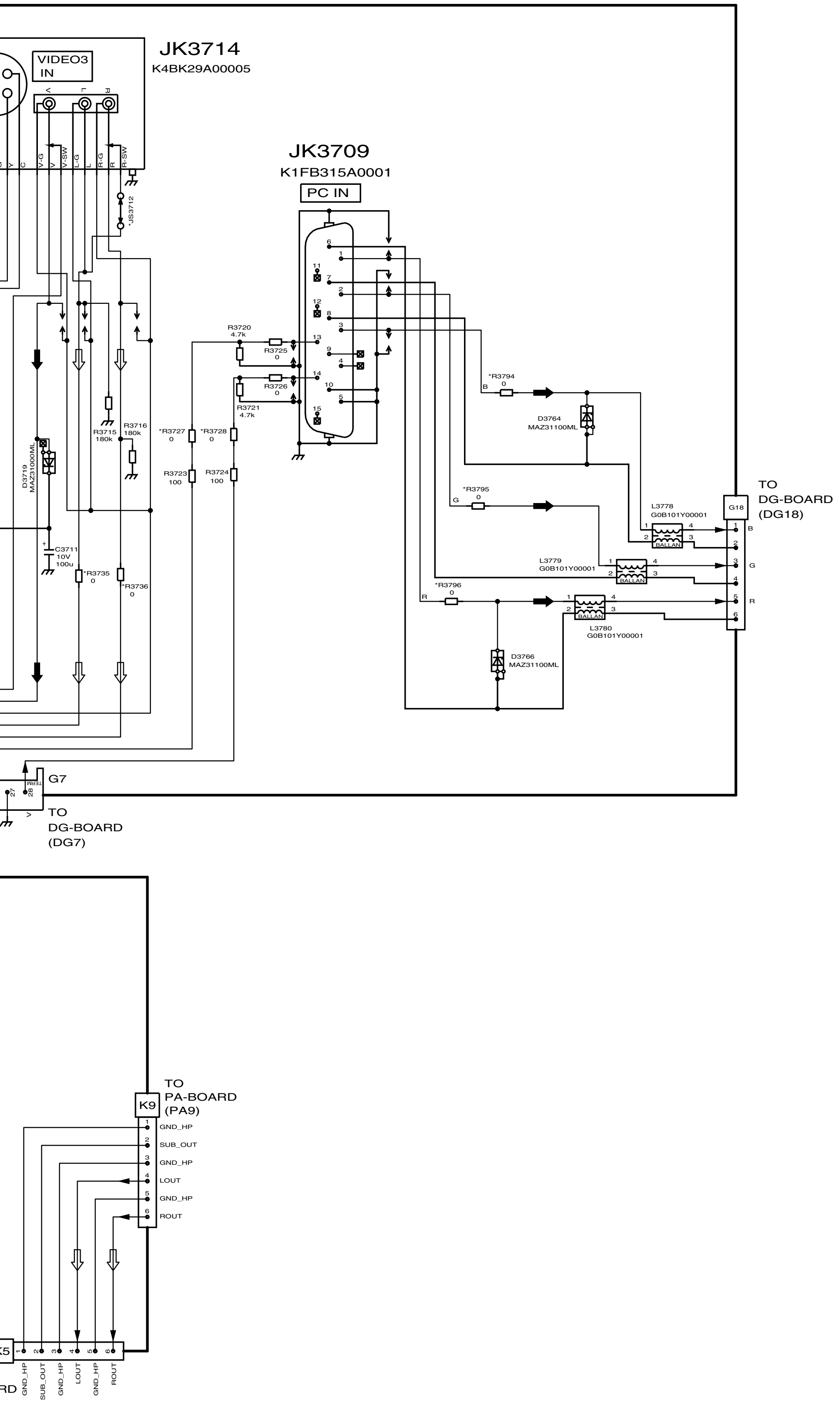

TO
K-BOARD
(K24)
C24
STB5V
LED_G
LED_R
KEY_SW
REMOCON
OPT
GND
AK_KEY_SW
AK_REMOCON
AK_OPT
SS_SOS
GND
Vda 67V
75V
AL_SOS
R7285
0
67V
Vda67V
R7219
220k
C7207
0.1u
100V
AL_UEH
AL_OSL
AL_OSH
AL_OML
AL_OMH
TERM
C22
TO
C1-BOARD
(C12)
ONENCETOR PIN NO)
C7211
0.1u
100V
R7287
0
R7211
22
R7212
22
R7214
22
AB_PCL
AB_CLK21
AB_CLK11
AB_LE5
R7294
120
R7295
120
AD_BD52
AD_BD51
AD_BD53
R7296
120
C7254
50V
100p
C7256
100p
50V
C7219
0.1u
100V
R7269
0
R7237
22
R7234
22
R7236
22
R7240
22
AB_LE7
AA_BD74
AA_BD76
AA_BD71
AA_BD73
AA_BD75
AA_BD72
R7302
0
R7303
0
CB7
TO
DATA
DRIVER
C7406
16V1u
R7301
0
R7304
0
R7205
1k
5V
C7217
0.1u
100V
R7286
0
R7233
22
R7235
22
R7239
22
AB_LE4
R7290
180
R7291
180
AE_BD42
AE_BD41
AE_BD43
R7292
180
C7253
100p
50V
C7255
100p
50V
C7213
0.1u
100V
R7268
0
R7217
22
R7215
22
R7216
22
R7218
22
AB_LE6
AC_BD64
AC_BD66
AC_BD60
AC_BD61
AC_BD63
AC_BD62
R7298
22
R7299
22
CB6
C7204
16V1u
R7297
22
R7300
22
5V
5
6
7
8
9

TH-42PA20U C2-Board Schematic Diagram

14.38. G and K-Board Schematic Diagram


A
B
C
D
E
1
2
3
4
G-BOARD TXN/G1QCSU
HP OUT
VIDEO3 IN
TP3737
*R3707 0
*R3708 22k
*R3706 9.1k
*R3703 2.2k
*R3704 3.3k
*R3705 5.1k
S3702 EVQ23405R ASPECT
S3703 EVQ23405R TV/VTR
S3704 EVQ23405R VOL.DN
S3705 EVQ23405R VOL.UP
*S3706 EVQ23405R CH.DN
*S3707 EVQ23405R CH.UP
GND
KEYSCAN
*R3733 0
*R3734 0
LOUT
ROUT
HPDET
*R3730 1k
SW5V
R3711 10k
D3715 MAZ31400ML
*D3716 MAZ31000ML
D3717 MAZ31000ML
D3719 MAZ31000ML
*C3712 16V 1u
C3711 10V 100u
R3715 180k
*R3735 0
JS3705
JS3706
G5
TO K-BOARD (K5)
GND_HP
SUB_OUT
GND_HP
LOUT
GND_HP
ROUT
G7
TO DG-BOARD (DG7)
SW9V
KEYSCAN
SW5V
HPDET
GND
SW
S2
GND_Y
Y
GND_C
C
V3_DET
V
SL
SR
H
V
K-BOARD TXN/K1QCSU
IC300 B3L000000017
CATS SENSER
REMOCON SENSER
RM300 PNA4601M04TV
C305 50V 0.01u
C301 6.3V 10u
R314 100
R310 47
D308 MA8056MTX
R313 1k
Q305 2SD0601A0L
REMOCON ON/OFF
R312 0
R311 220k
STBY5V
POWER SW
*S300
LAST MEM
*R320 0
*C304 50V 0.01u
D310 MA3X152K0L
ALL_OFF
SW5V
JS309 0
JS310 0
JS311 0
JS307 0
JS308 0
Q300 B1ABCF000010
LED R ON
R302 470
D300 MA3X152K0L
D301 MA3X152K0L
R300 5.6k
R301 22k
R304 22k
R306 1k
Q301 B1ABCF000010
LED G ON
D309 MA3X152K0L
R317 5.6k
JS304 0
C300 50V 47u
D302 LNH101WHKAF4
STB_LED
ON_LED
D303 MA3X152K0L
5V
STB5V
*JS302
*JS301
K24
TO C-BOARD (C24)
STBY5V
LED_G
LED_R
CPU_GND
REMOCON
OPT
*K34
TO SS-BOARD (SS34)
STB_PS
NC
GND
K12
TO DG-BOARD (DG12)
KEY1
STB_LED (LED_R)
ON_LED (LED_G)
GND
GND
STB5V
5V
K5
TO G-BOARD (G5)
GND_HP
SUB_OUT
GND_HP
LOUT
GND_HP
ROUT

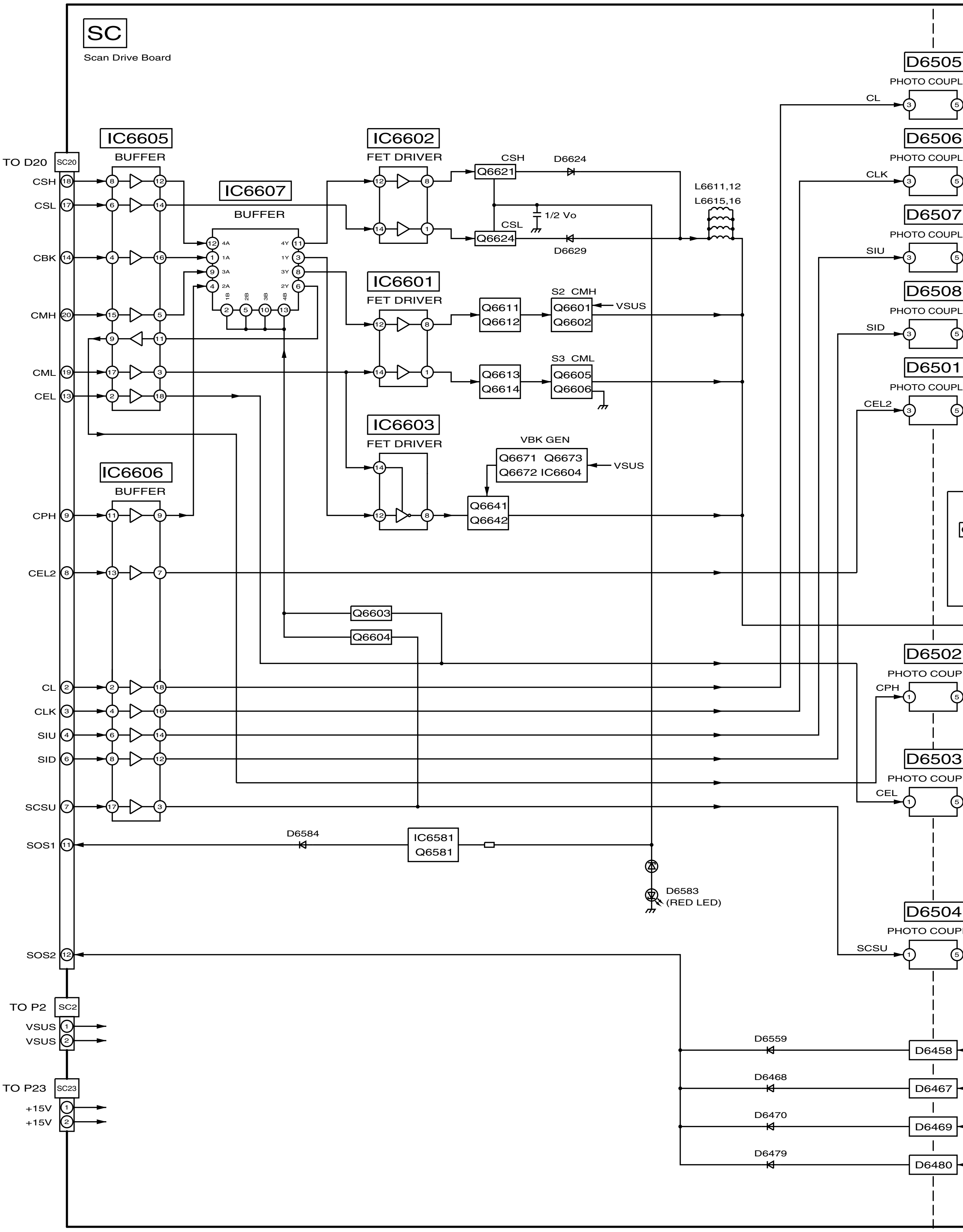
TH-42PA20U
G and K-Board Schematic Diagram


JK3714
K4BK29A00005
VIDEO3 IN
V
L
R
Y
C
V-G
V
V-SW
L-G
L
R-G
R
R-SW
*JS3712
JK3709
K1FB315A0001
PC IN
6
1
11
7
2
12
8
3
13
9
4
14
10
5
15
R3720
4.7k
R3725
0
R3726
0
R3721
4.7k
*R3727
0
*R3728
0
R3723
100
R3724
100
R3715
180k
R3716
180k
D3719
MAZ31000ML
C3711
10V
100u
*R3735
0
*R3736
0
*R3794
0
B
D3764
MAZ31100ML
*R3795
0
G
*R3796
0
R
D3766
MAZ31100ML
L3778
G0B101Y00001
L3779
G0B101Y00001
L3780
G0B101Y00001
BALLAN
G18
TO
DG-BOARD
(DG18)
B
G
R
G7
27
28
TO
DG-BOARD
(DG7)
K9
TO
PA-BOARD
(PA9)
GND_HP
SUB_OUT
GND_HP
LOUT
GND_HP
ROUT
K5
RD

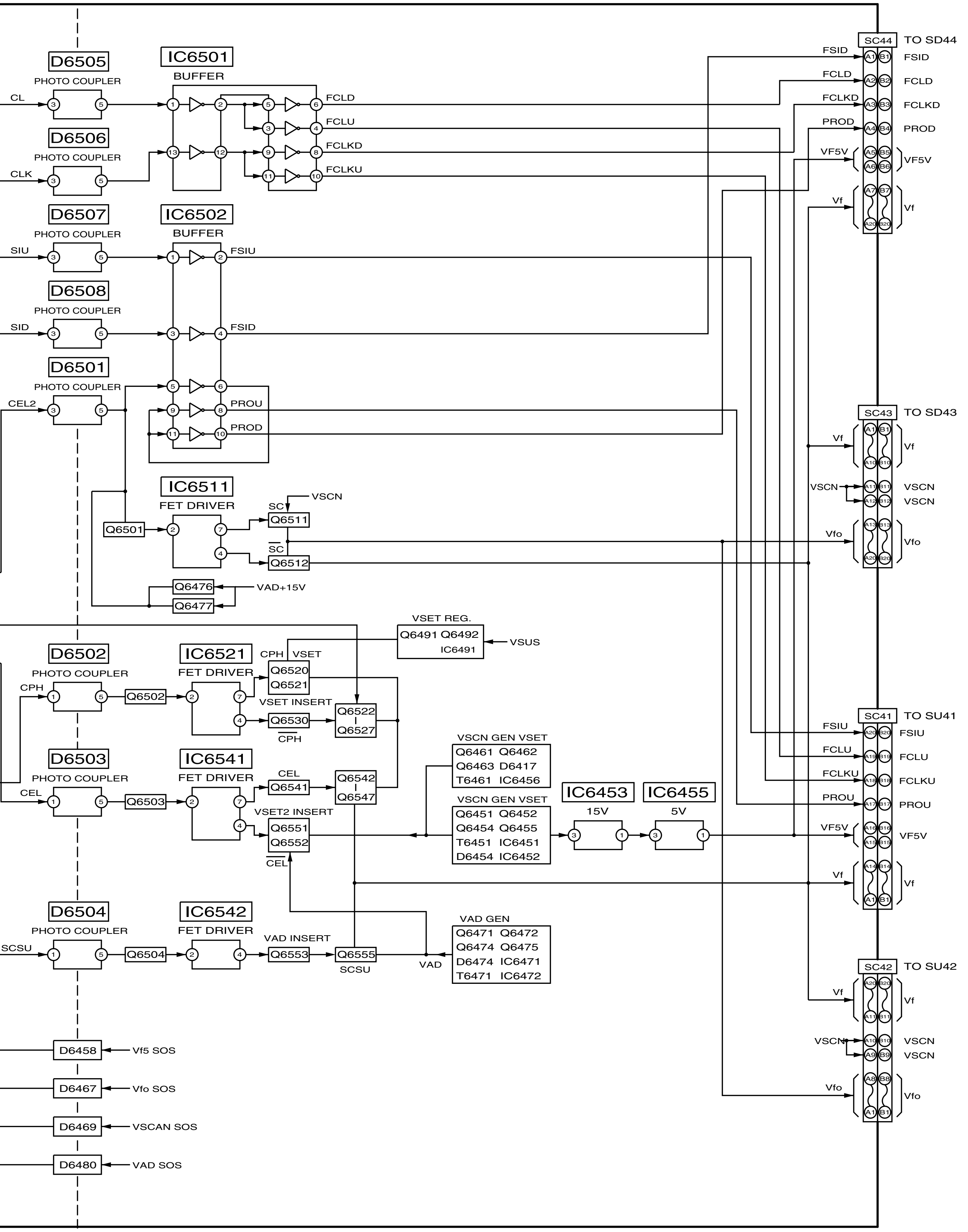
TH-42PA20U
G and K-Board Schematic Diagram

5 6 7

14.39. SC-Board Block Diagram

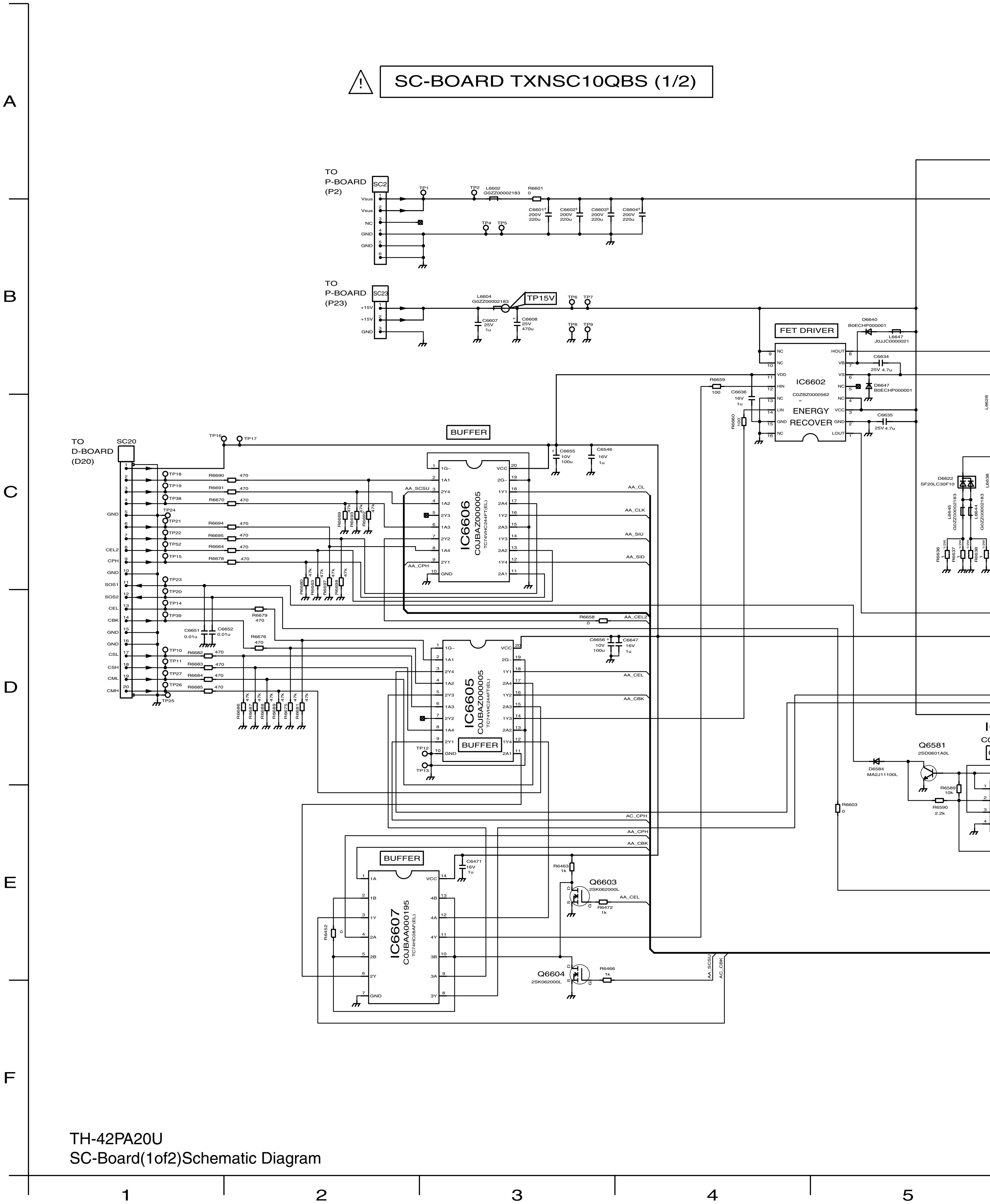

SC
Scan Drive Board
TO D20
SC20
CSH
CSL
CBK
CMH
CML
CEL
CPH
CEL2
CL
CLK
SIU
SID
SCSU
SOS1
SOS2
TO P2
SC2
VSUS
VSUS
TO P23
SC23
+15V
+15V
IC6605
BUFFER
IC6606
BUFFER
IC6607
BUFFER
IC6602
FET DRIVER
IC6601
FET DRIVER
IC6603
FET DRIVER
CSH
Q6621
D6624
CSL
Q6624
D6629
1/2 Vo
L6611,12
L6615,16
S2 CMH
Q6611
Q6612
Q6601
Q6602
VSUS
S3 CML
Q6613
Q6614
Q6605
Q6606
VBK GEN
Q6671 Q6673
Q6672 IC6604
VSUS
Q6641
Q6642
Q6603
Q6604
D6584
IC6581
Q6581
D6583
(RED LED)
D6505
PHOTO COUPL
CL
D6506
PHOTO COUPL
CLK
D6507
PHOTO COUPL
SIU
D6508
PHOTO COUPL
SID
D6501
PHOTO COUPL
CEL2
D6502
PHOTO COUP
CPH
D6503
PHOTO COUP
CEL
D6504
PHOTO COUP
SCSU
D6559
D6458
D6468
D6467
D6470
D6469
D6479
D6480

TH-42PA20U
SC-Board Block Diagram

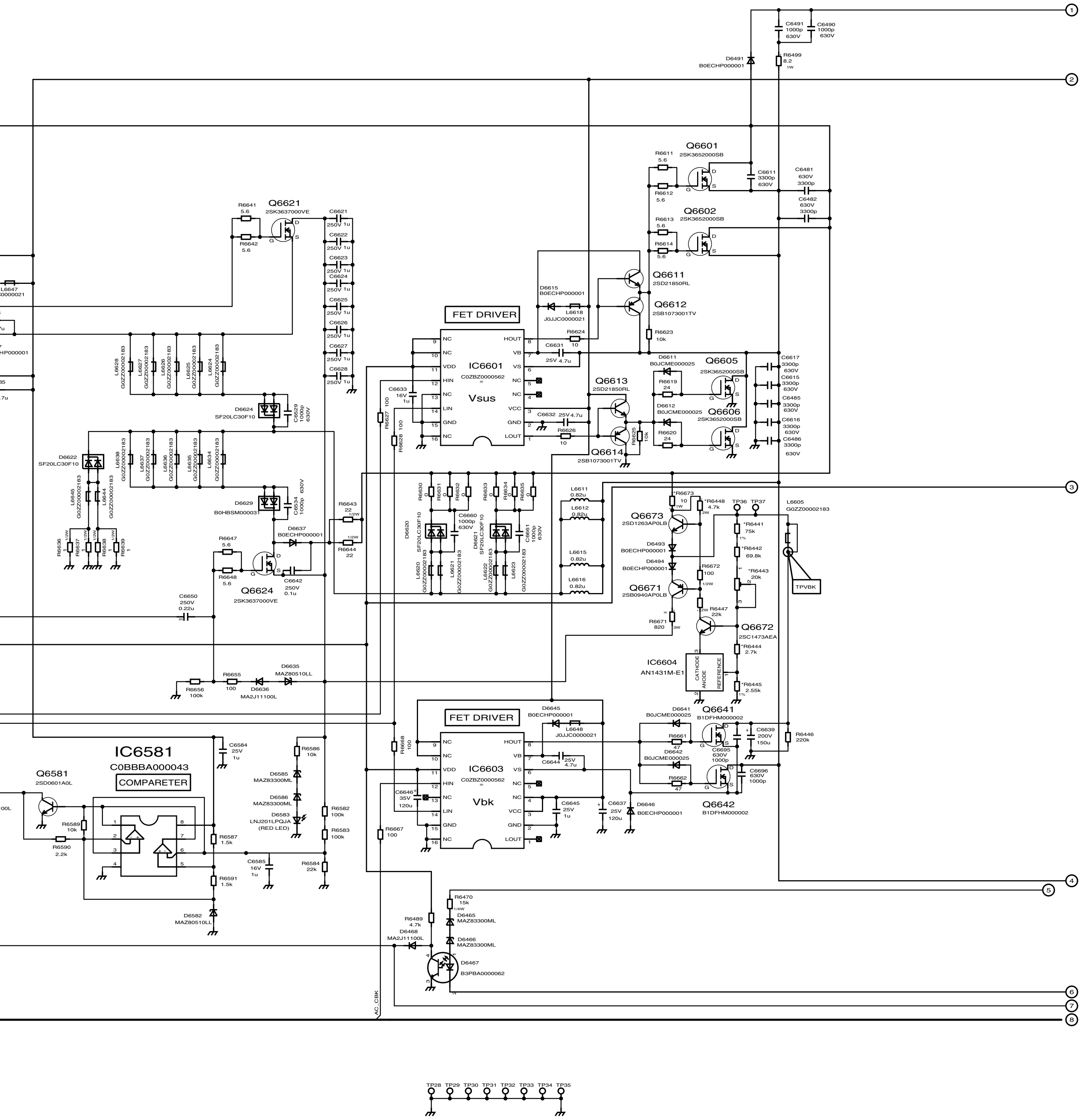

D6505
PHOTO COUPLER
CL
IC6501
BUFFER
FCLD
FCLU
FCLKD
FCLKU
D6506
PHOTO COUPLER
CLK
D6507
PHOTO COUPLER
SIU
IC6502
BUFFER
FSIU
D6508
PHOTO COUPLER
SID
FSID
D6501
PHOTO COUPLER
CEL2
PROU
PROD
IC6511
FET DRIVER
Q6501
SC
VSCN
Q6511
SC
Q6512
Q6476
Q6477
VAD+15V
VSET REG.
Q6491 Q6492
IC6491
VSUS
D6502
PHOTO COUPLER
CPH
Q6502
IC6521
FET DRIVER
CPH VSET
Q6520
Q6521
VSET INSERT
Q6530
CPH
Q6522
Q6527
D6503
PHOTO COUPLER
CEL
Q6503
IC6541
FET DRIVER
CEL
Q6541
Q6542
Q6547
VSET2 INSERT
Q6551
Q6552
CEL
VSCN GEN VSET
Q6461 Q6462
Q6463 D6417
T6461 IC6456
VSCN GEN VSET
Q6451 Q6452
Q6454 Q6455
T6451 IC6451
D6454 IC6452
IC6453
15V
IC6455
5V
D6504
PHOTO COUPLER
SCSU
Q6504
IC6542
FET DRIVER
VAD INSERT
Q6553
Q6555
SCSU
VAD
VAD GEN
Q6471 Q6472
Q6474 Q6475
D6474 IC6471
T6471 IC6472
D6458
Vf5 SOS
D6467
Vfo SOS
D6469
VSCAN SOS
D6480
VAD SOS
SC44
TO SD44
FSID
FCLD
FCLKD
PROD
VF5V
Vf
SC43
TO SD43
Vf
VSCN
VSCN
Vfo
SC41
TO SU41
FSIU
FCLU
FCLKU
PROU
VF5V
Vf
SC42
TO SU42
Vf
VSCN
VSCN
Vfo

TH-42PA20U
SC-Board Block Diagram

14.40. SC-Board (1 of 2) Schematic Diagram


SC-BOARD TXNSC10QBS (1/2)
A
B
C
D
E
F
1
2
3
4
5
TO P-BOARD (P2)
SC2
Vsus
NC
GND
TP1
TP2
L6602 G0ZZ00002183
R6601 0
C6601 200V 220u
C6602 200V 220u
C6603 200V 220u
C6604 200V 220u
TP4
TP5
TO P-BOARD (P23)
SC23
+15V
GND
L6604 G0ZZ00002183
TP15V
C6607 25V 1u
C6608 25V 470u
TP6
TP7
TP8
TP9
FET DRIVER
D6640 B0ECHP000001
L6647 J0JJC0000021
IC6602
C0ZBZ0000562
ENERGY RECOVER
HOUT
VB
VS
VDD
HIN
LIN
VCC
LOUT
C6634 25V 4.7u
D6647 B0ECHP000001
C6635 25V 4.7u
R6659 100
C6636 16V 1u
R6660 100
L6628
D6622 SF20LC30F10
L6645 G0ZZ00002183
L6644 G0ZZ00002183
L6638
R6636
R6637
R6638
TO D-BOARD (D20)
SC20
TP16
TP17
BUFFER
C6655 10V 100u
C6546 16V 1u
GND
CEL2
CPH
SOS1
SOS2
CEL
CBK
CSL
CSH
CML
CMH
TP18
TP19
TP38
TP24
TP21
TP22
TP52
TP15
TP23
TP20
TP14
TP39
TP10
TP11
TP27
TP26
TP25
R6690 470
R6691 470
R6670 470
R6694 470
R6695 470
R6664 470
R6678 470
R6679 470
R6676 470
R6682 470
R6683 470
R6684 470
R6685 470
C6651 0.01u
C6652 0.01u
IC6606
C0JBAZ000005
TC74VHC244FT(EL)
AA_SCSU
AA_CPH
AA_CL
AA_CLK
AA_SIU
AA_SID
R6658 0
AA_CEL2
C6656 10V 100u
C6647 16V 1u
IC6605
C0JBAZ000005
TC74VHC244FT(EL)
AA_CEL
AA_CBK
TP12
TP13
BUFFER
Q6581 2SD0601A0L
D6584 MA2J11100L
R6589 10k
R6590 2.2k
R6603 0
AC_CPH
AA_CPH
AA_CBK
BUFFER
IC6607
C0JBAA000195
TC74HC08AF(EL)
C6471 16V 1u
R6452 0
R6463 1k
Q6603 2SK062000L
R6472 1k
AA_CEL
Q6604 2SK062000L
R6466 1k
AA_SCSU
AC_CBK
1G
1A1
2Y4
1A2
2Y3
1A3
2Y2
1A4
2Y1
GND
VCC
2G
1Y1
2A4
1Y2
2A3
1Y3
2A2
1Y4
2A1
1A
1B
1Y
2A
2B
2Y
4B
4A
4Y
3B
3A
3Y

TH-42PA20U
SC-Board(1of2)Schematic Diagram

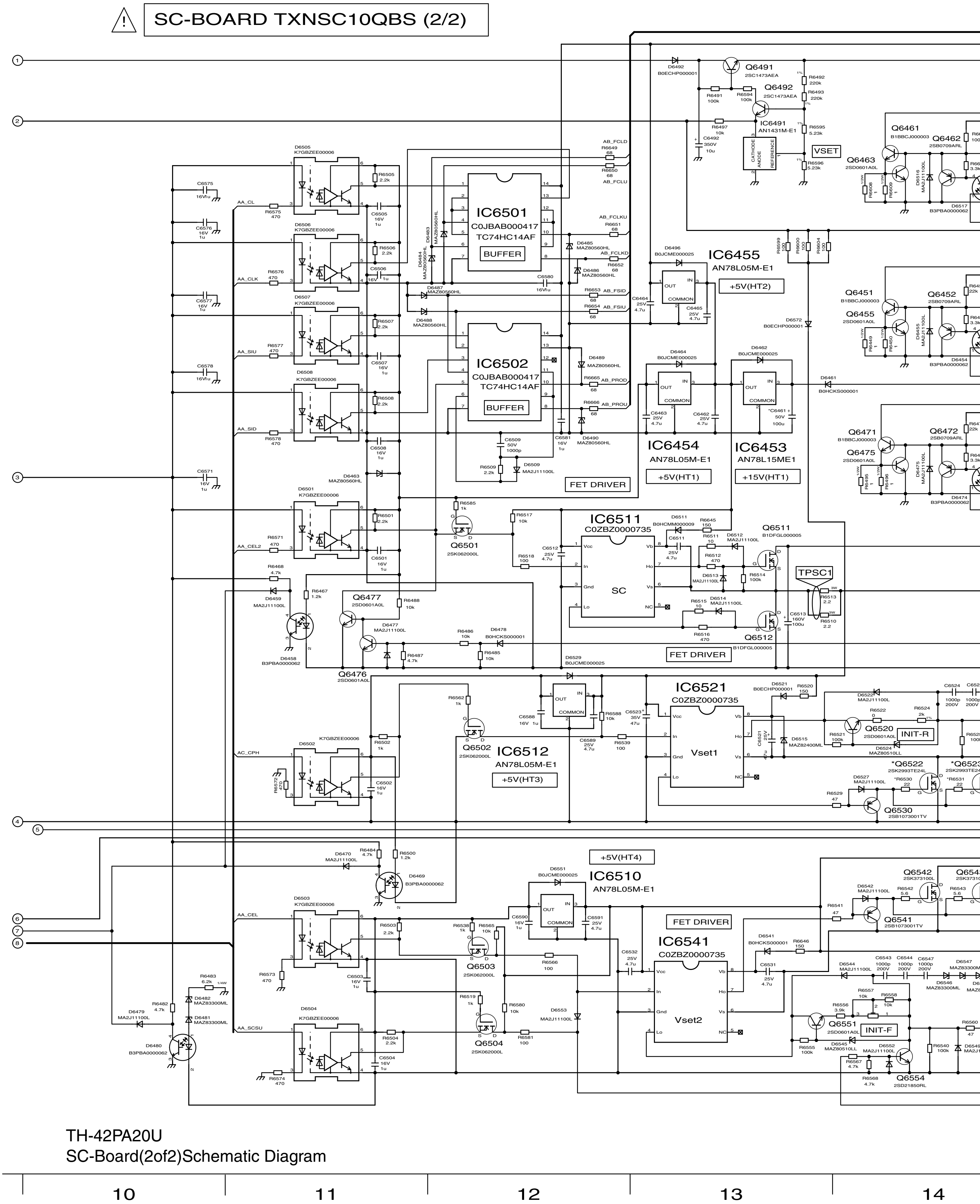


①
②
③
④
⑤
⑥
⑦
⑧
C6491 1000p 630V
C6490 1000p 630V
D6491 B0ECHP000001
R6499 8.2 1W
Q6601 2SK3652000SB
R6611 5.6
R6612 5.6
C6611 3300p 630V
C6481 630V 3300p
C6482 630V 3300p
Q6602 2SK3652000SB
R6613 5.6
R6614 5.6
Q6611 2SD21850RL
Q6612 2SB1073001TV
D6615 B0ECHP000001
L6618 J0JJC0000021
R6623 10k
R6624 10
C6631 10
25V 4.7u
FET DRIVER
IC6601
C0ZBZ0000562
Vsus
NC
VDD
HIN
LIN
GND
HOUT
VB
VS
VCC
LOUT
C6632 25V 4.7u
R6626 10
R6625 10k
Q6613 2SD21850RL
Q6614 2SB1073001TV
D6611 B0JCME000025
R6619 24
D6612 B0JCME000025
R6620 24
Q6605 2SK3652000SB
Q6606 2SK3652000SB
C6617 3300p 630V
C6615 3300p 630V
C6485 3300p 630V
C6616 3300p 630V
C6486 3300p 630V
C6633 16V 1u
R6627 100
R6628 100
R6641 5.6
R6642 5.6
Q6621 2SK3637000VE
C6621 250V 1u
C6622 250V 1u
C6623 250V 1u
C6624 250V 1u
C6625 250V 1u
C6626 250V 1u
C6627 250V 1u
C6628 250V 1u
L6647 J0JJC0000021
L6628 G0ZZ00002183
L6627 G0ZZ00002183
L6626 G0ZZ00002183
L6625 G0ZZ00002183
L6624 G0ZZ00002183
D6624 SF20LC30F10
C6629 1000p 630V
D6622 SF20LC30F10
L6638 G0ZZ00002183
L6637 G0ZZ00002183
L6636 G0ZZ00002183
L6635 G0ZZ00002183
L6634 G0ZZ00002183
L6645 G0ZZ00002183
L6644 G0ZZ00002183
D6629 B0HBSM000031
C6634 1000p 630V
R6636
R6637
R6638
R6639
R6643 22 1/2W
R6644 22 1/2W
D6637 B0ECHP000001
R6647 5.6
R6648 5.6
Q6624 2SK3637000VE
C6642 250V 0.1u
C6650 250V 0.22u
R6630
R6631
R6632
R6633
R6634
R6635
D6620 SF20LC30F10
D6621 SF20LC30F10
C6660 1000p 630V
C6661 1000p 630V
L6620 G0ZZ00002183
L6621 G0ZZ00002183
L6622 G0ZZ00002183
L6623 G0ZZ00002183
L6611 0.82u
L6612 0.82u
L6615 0.82u
L6616 0.82u
R6673 10 1W
R6448 4.7k 2W
TP36
TP37
L6605 G0ZZ00002183
Q6673 2SD1263AP0LB
D6493 B0ECHP000001
D6494 B0ECHP000001
R6672 100 1/2W
Q6671 2SB0940AP0LB
R6441 75k 1%
R6442 69.8k
R6443 20k
TPVBK
R6447 22k
R6671 820 3W
Q6672 2SC1473AEA
R6444 2.7k
IC6604 AN1431M-E1
CATHODE
ANODE
REFERENCE
R6445 2.55k 1%
R6656 100k
R6655 100
D6636 MA2J11100L
D6635 MAZ80510LL
FET DRIVER
IC6603
C0ZBZ0000562
Vbk
D6645 B0ECHP000001
L6648 J0JJC0000021
C6644 25V 4.7u
C6645 25V 1u
C6637 25V 120u
D6646 B0ECHP000001
C6646 35V 120u
R6668 100
R6667 100
D6641 B0JCME000025
R6661 47
D6642 B0JCME000025
R6662 47
Q6641 B1DFHM000002
Q6642 B1DFHM000002
C6695 630V 1000p
C6696 630V 1000p
C6639 200V 150u
R6446 220k
IC6581
C0BBBA000043
COMPARETER
Q6581 2SD0601A0L
R6589 10k
R6590 2.2k
C6584 25V 1u
R6587 1.5k
R6591 1.5k
C6585 16V 1u
D6582 MAZ80510LL
R6586 10k
D6585 MAZ83300ML
D6586 MAZ83300ML
D6583 LNJ201LPQJA (RED LED)
R6582 100k
R6583 100k
R6584 22k
R6470 15k 1/4W
D6465 MAZ83300ML
D6466 MAZ83300ML
R6489 4.7k
D6468 MA2J11100L
D6467 B3PBA0000062
AC_CBK
TP28
TP29
TP30
TP31
TP32
TP33
TP34
TP35

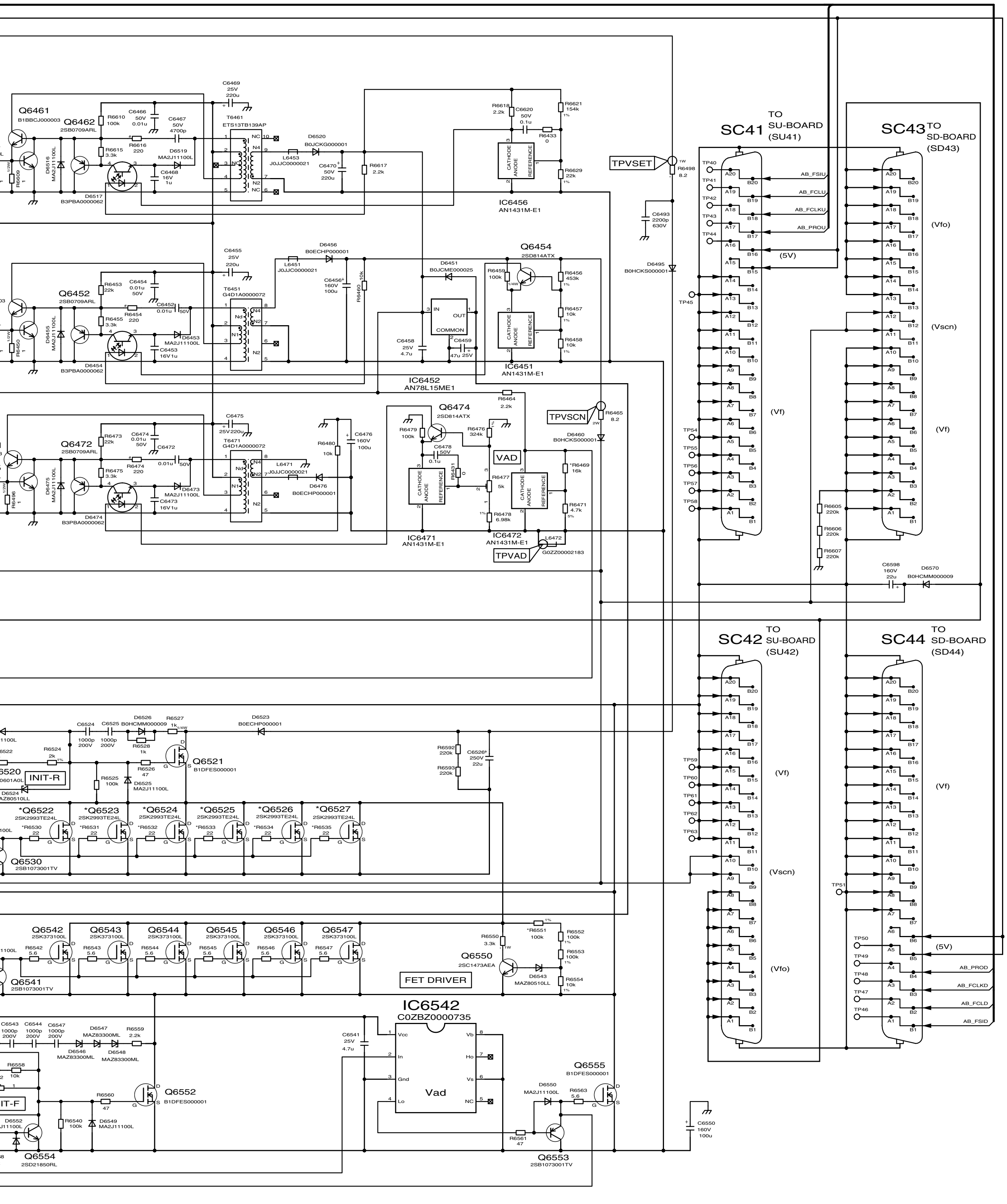
TH-42PA20U
SC-Board(1of2)Schematic Diagram

5	6	7	8	9

14.41. SC-Board (2 of 2) Schematic Diagram


SC-BOARD TXNSC10QBS (2/2)
IC6501
C0JBAB000417
TC74HC14AF
BUFFER
IC6502
C0JBAB000417
TC74HC14AF
BUFFER
IC6455
AN78L05M-E1
+5V(HT2)
IC6454
AN78L05M-E1
+5V(HT1)
IC6453
AN78L15ME1
+15V(HT1)
FET DRIVER
IC6511
C0ZBZ0000735
SC
TPSC1
IC6512
AN78L05M-E1
+5V(HT3)
IC6521
C0ZBZ0000735
Vset1
INIT-R
+5V(HT4)
IC6510
AN78L05M-E1
IC6541
C0ZBZ0000735
Vset2
INIT-F
VSET
Q6491
Q6492
IC6491
AN1431M-E1
Q6461
Q6462
Q6463
Q6451
Q6452
Q6455
Q6471
Q6472
Q6475
Q6501
Q6502
Q6503
Q6504
Q6511
Q6512
Q6476
Q6477
Q6520
Q6522
Q6530
Q6541
Q6542
Q6551
Q6554
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AC_CPH
AA_CEL
AA_SCSU
AB_FCLD
AB_FCLU
AB_FCLKU
AB_FCLKD
AB_FSID
AB_FSIU
AB_PROD
AB_PROU
1
2
3
4
5
6
7
8
10
11
12
13
14

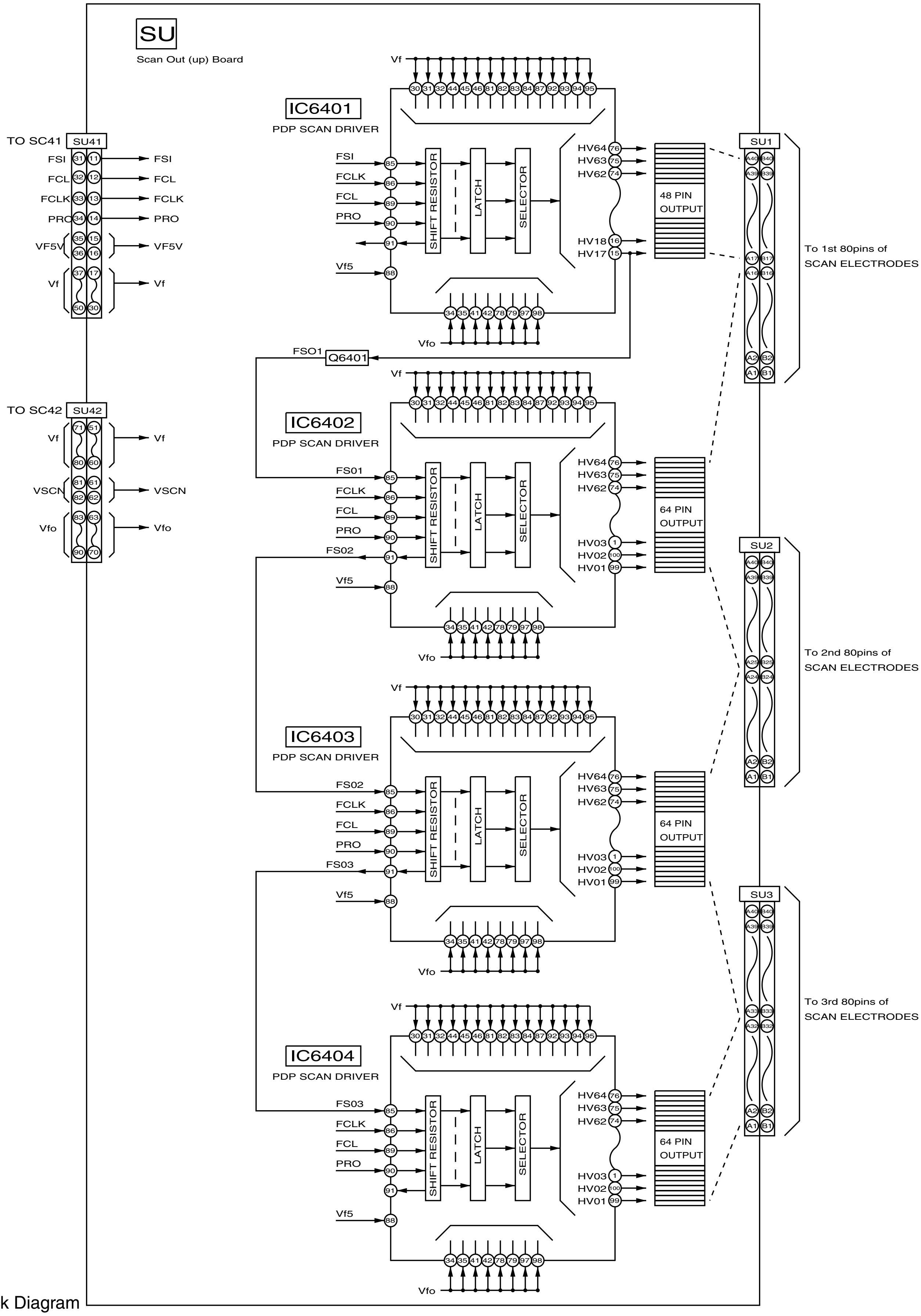
TH-42PA20U
SC-Board(2of2)Schematic Diagram


Q6461
B1BBCJ000003
Q6462
2SB0709ARL
T6461
ETS13TB139AP
D6520
B0JCKG000001
L6453
J0JJC0000021
IC6456
AN1431M-E1
SC41
TO
SU-BOARD
(SU41)
SC43
TO
SD-BOARD
(SD43)
TPVSET
R6498
8.2
C6493
2200p
630V
D6495
B0HCKS000001
Q6452
2SB0709ARL
T6451
G4D1A0000072
D6456
B0ECHP000001
L6451
J0JJC0000021
D6451
B0JCME000025
Q6454
2SD814ATX
IC6452
AN78L15ME1
IC6451
AN1431M-E1
Q6472
2SB0709ARL
T6471
G4D1A0000072
L6471
J0JJC0000021
D6476
B0ECHP000001
Q6474
2SD814ATX
VAD
TPVSCN
D6460
B0HCKS000001
IC6471
AN1431M-E1
IC6472
AN1431M-E1
TPVAD
L6472
G0ZZ00002183
AB_FSIU
AB_FCLU
AB_FCLKU
AB_PROU
(5V)
(Vfo)
(Vscn)
(Vf)
TP40
TP41
TP42
TP43
TP44
TP45
TP54
TP55
TP56
TP57
TP58
R6605
220k
R6606
220k
R6607
220k
C6598
160V
22u
D6570
B0HCMM000009
SC42
TO
SU-BOARD
(SU42)
SC44
TO
SD-BOARD
(SD44)
TP59
TP60
TP61
TP62
TP63
TP51
TP50
TP49
TP48
TP47
TP46
AB_PROD
AB_FCLKD
AB_FCLD
AB_FSID
D6526
B0HCMM000009
D6523
B0ECHP000001
Q6521
B1DFES000001
INIT-R
Q6520
D6524
MAZ80510LL
D6525
MA2J11100L
*Q6522
2SK2993TE24L
*Q6523
2SK2993TE24L
*Q6524
2SK2993TE24L
*Q6525
2SK2993TE24L
*Q6526
2SK2993TE24L
*Q6527
2SK2993TE24L
Q6530
2SB1073001TV
Q6542
2SK373100L
Q6543
2SK373100L
Q6544
2SK373100L
Q6545
2SK373100L
Q6546
2SK373100L
Q6547
2SK373100L
Q6541
2SB1073001TV
Q6550
2SC1473AEA
D6543
MAZ80510LL
FET DRIVER
IC6542
C0ZBZ0000735
Vcc
Vb
In
Ho
Gnd
Vs
Lo
NC
Vad
D6547
MAZ83300ML
D6546
MAZ83300ML
D6548
MAZ83300ML
Q6552
B1DFES000001
INIT-F
D6552
MA2J11100L
D6549
MA2J11100L
Q6554
2SD2185ORL
Q6555
B1DFES000001
D6550
MA2J11100L
Q6553
2SB1073001TV
C6550
160V
100u

TH-42PA20U
SC-Board(2of2)Schematic Diagram

14 15 16 17 18

14.42. SU-Board Block Diagram


SU
Scan Out (up) Board
TO SC41
SU41
FSI
FCL
FCLK
PRO
VF5V
Vf
TO SC42
SU42
Vf
VSCN
Vfo
IC6401
PDP SCAN DRIVER
IC6402
PDP SCAN DRIVER
IC6403
PDP SCAN DRIVER
IC6404
PDP SCAN DRIVER
SHIFT RESISTOR
LATCH
SELECTOR
Vf5
FS01
FS02
FS03
FSO1
Q6401
HV64
HV63
HV62
HV18
HV17
HV03
HV02
HV01
48 PIN OUTPUT
64 PIN OUTPUT
SU1
SU2
SU3
To 1st 80pins of SCAN ELECTRODES
To 2nd 80pins of SCAN ELECTRODES
To 3rd 80pins of SCAN ELECTRODES

TH-42PA20U
SU-Board Block Diagram

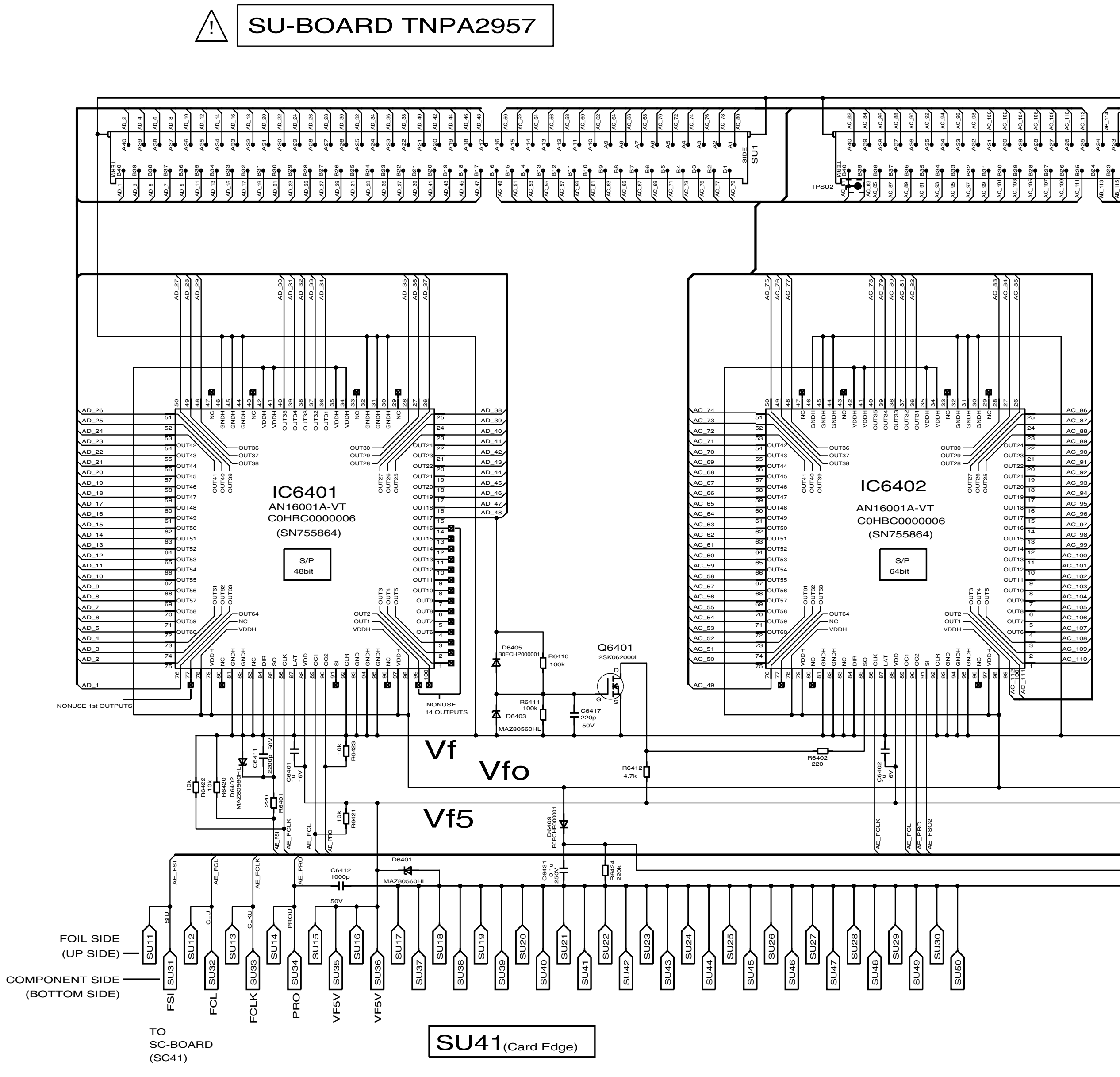
o 1st 80pins of
CAN ELECTRODES

o 2nd 80pins of
CAN ELECTRODES

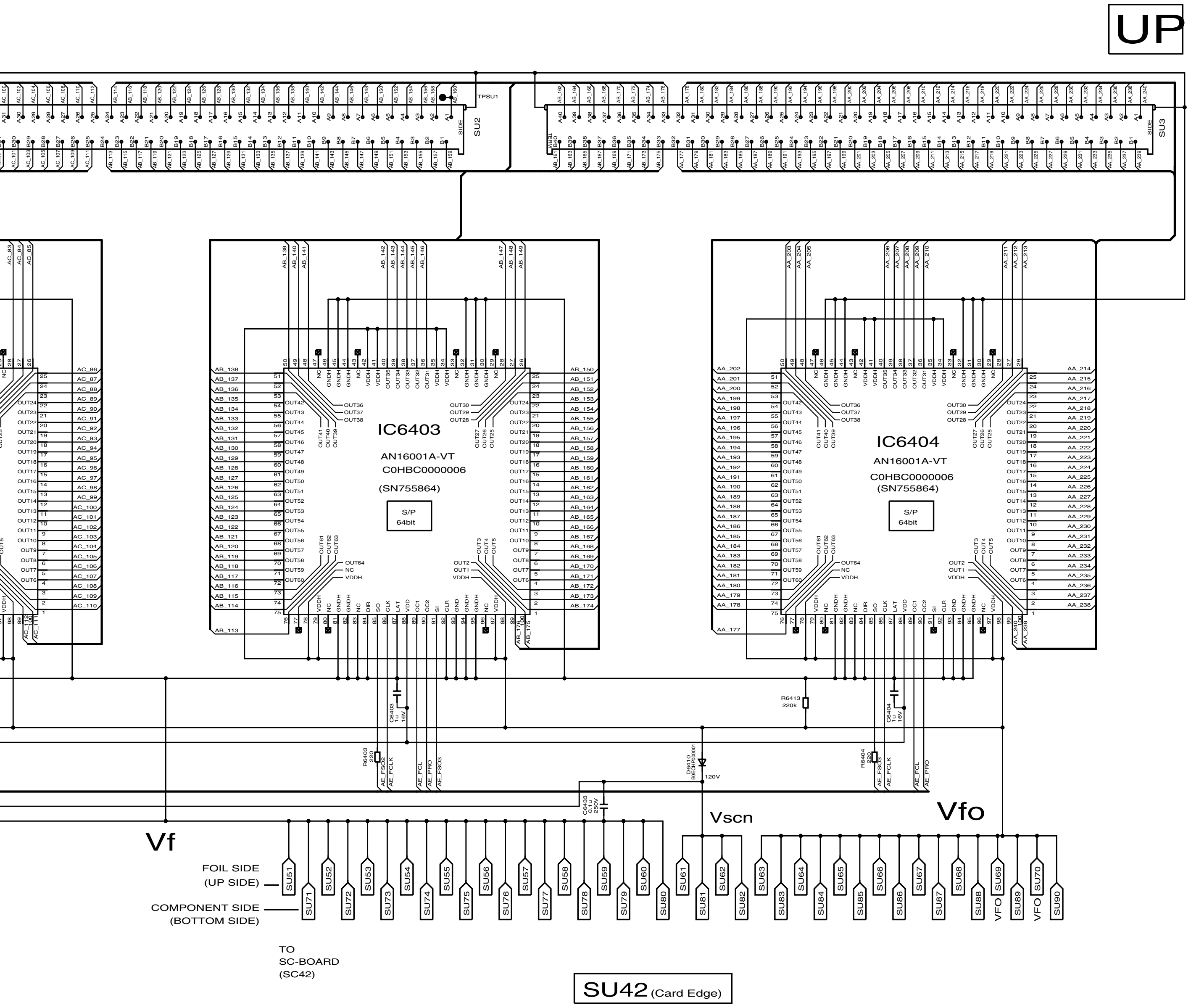
o 3rd 80pins of
CAN ELECTRODES

TH-42PA20U
SU-Board Block Diagram

14.43. SU-Board Schematic Diagram


SU-BOARD TNPA2957
SU1
TPSU2
IC6401
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
48bit
IC6402
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
NONUSE 1st OUTPUTS
NONUSE
14 OUTPUTS
Q6401
2SK062000L
D6405
B0ECHP000001
R6410
100k
R6411
100k
D6403
MAZ80560HL
C6417
220p
50V
R6412
4.7k
R6402
220
C6402
1u
16V
Vf
Vfo
Vf5
D6409
B0ECHP000001
C6431
0.1u
250V
R6424
220k
C6411
2200p 50V
D6402
MAZ80560HL
C6401
1u
16V
R6422
10k
R6420
10k
R6401
220
R6423
10k
R6421
10k
C6412
1000p
50V
D6401
MAZ80560HL
AE_FSI
AE_FCL
AE_FCLK
AE_PRO
AE_FSO2
SIU
CLU
CLKU
PROU
SU11
SU12
SU13
SU14
SU15
SU16
SU17
SU18
SU19
SU20
SU21
SU22
SU23
SU24
SU25
SU26
SU27
SU28
SU29
SU30
SU31
SU32
SU33
SU34
SU35
SU36
SU37
SU38
SU39
SU40
SU41
SU42
SU43
SU44
SU45
SU46
SU47
SU48
SU49
SU50
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
FSI
FCL
FCLK
PRO
VF5V
VF5V
TO
SC-BOARD
(SC41)
SU41(Card Edge)
A
B
C
D
E
F
1
2
3
4
5

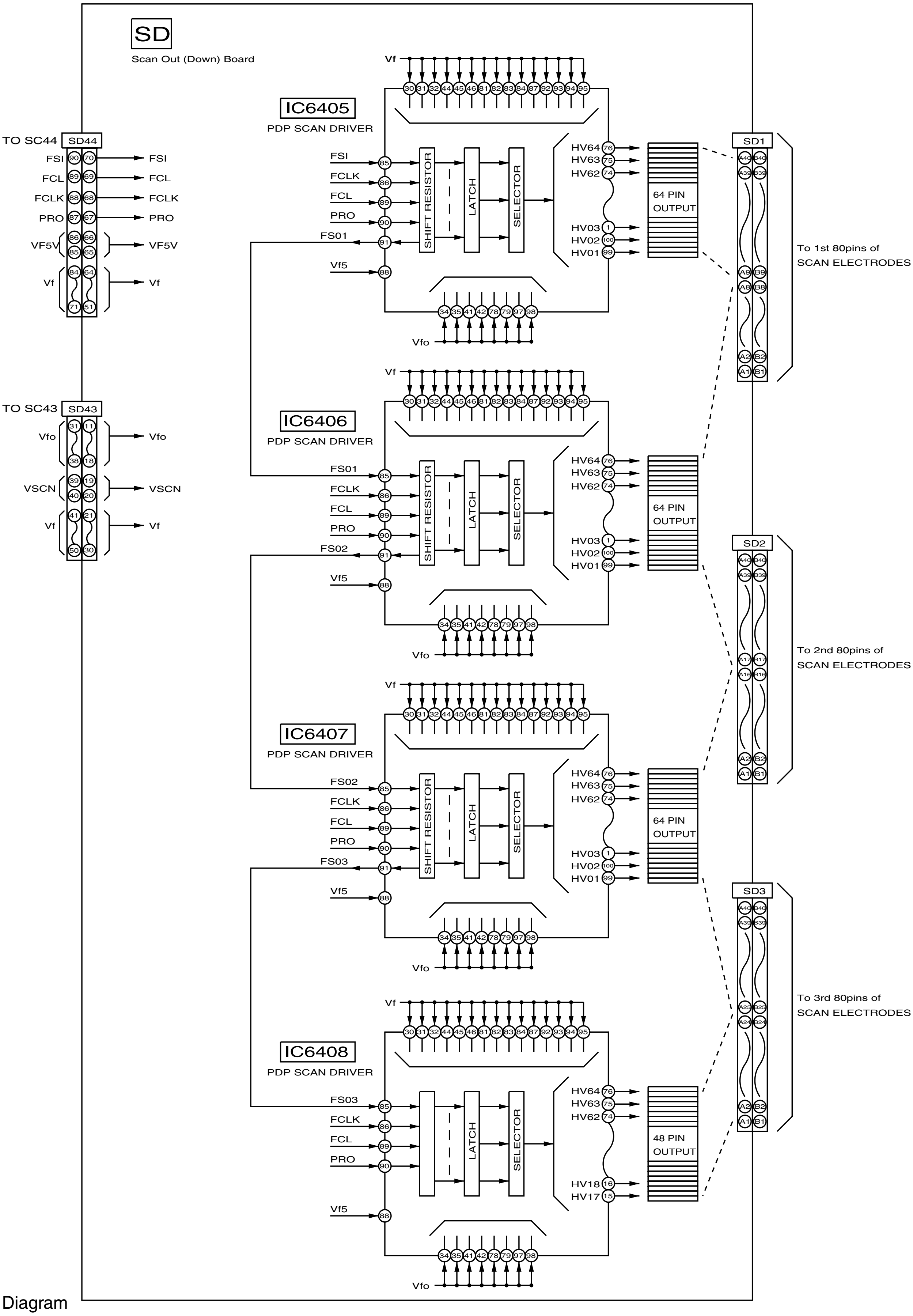
TH-42PA20U
SU-Board Schematic Diagram


UP
TPSU1
SU2
SU3
IC6403
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6404
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
C6403
1u
16V
R6403
220
R6413
220k
C6404
1u
16V
R6404
220
D6410
120V
C6433
0.1u
250V
Vf
Vscn
Vfo
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
SU51
SU52
SU53
SU54
SU55
SU56
SU57
SU58
SU59
SU60
SU61
SU62
SU63
SU64
SU65
SU66
SU67
SU68
SU69
SU70
SU71
SU72
SU73
SU74
SU75
SU76
SU77
SU78
SU79
SU80
SU81
SU82
SU83
SU84
SU85
SU86
SU87
SU88
SU89
SU90
VFO
VFO
TO
SC-BOARD
(SC42)
SU42 (Card Edge)

TH-42PA20U
SU-Board Schematic Diagram

5 6 7 8 9

14.44. SD-Board Block Diagram


SD
Scan Out (Down) Board
TO SC44
SD44
FSI
FCL
FCLK
PRO
VF5V
Vf
TO SC43
SD43
Vfo
VSCN
Vf
IC6405
PDP SCAN DRIVER
IC6406
PDP SCAN DRIVER
IC6407
PDP SCAN DRIVER
IC6408
PDP SCAN DRIVER
FSI
FCLK
FCL
PRO
FS01
FS02
FS03
Vf5
Vf
Vfo
SHIFT RESISTOR
LATCH
SELECTOR
HV64
HV63
HV62
HV03
HV02
HV01
HV18
HV17
64 PIN OUTPUT
48 PIN OUTPUT
SD1
SD2
SD3
To 1st 80pins of SCAN ELECTRODES
To 2nd 80pins of SCAN ELECTRODES
To 3rd 80pins of SCAN ELECTRODES

TH-42PA20U
SD-Board Block Diagram

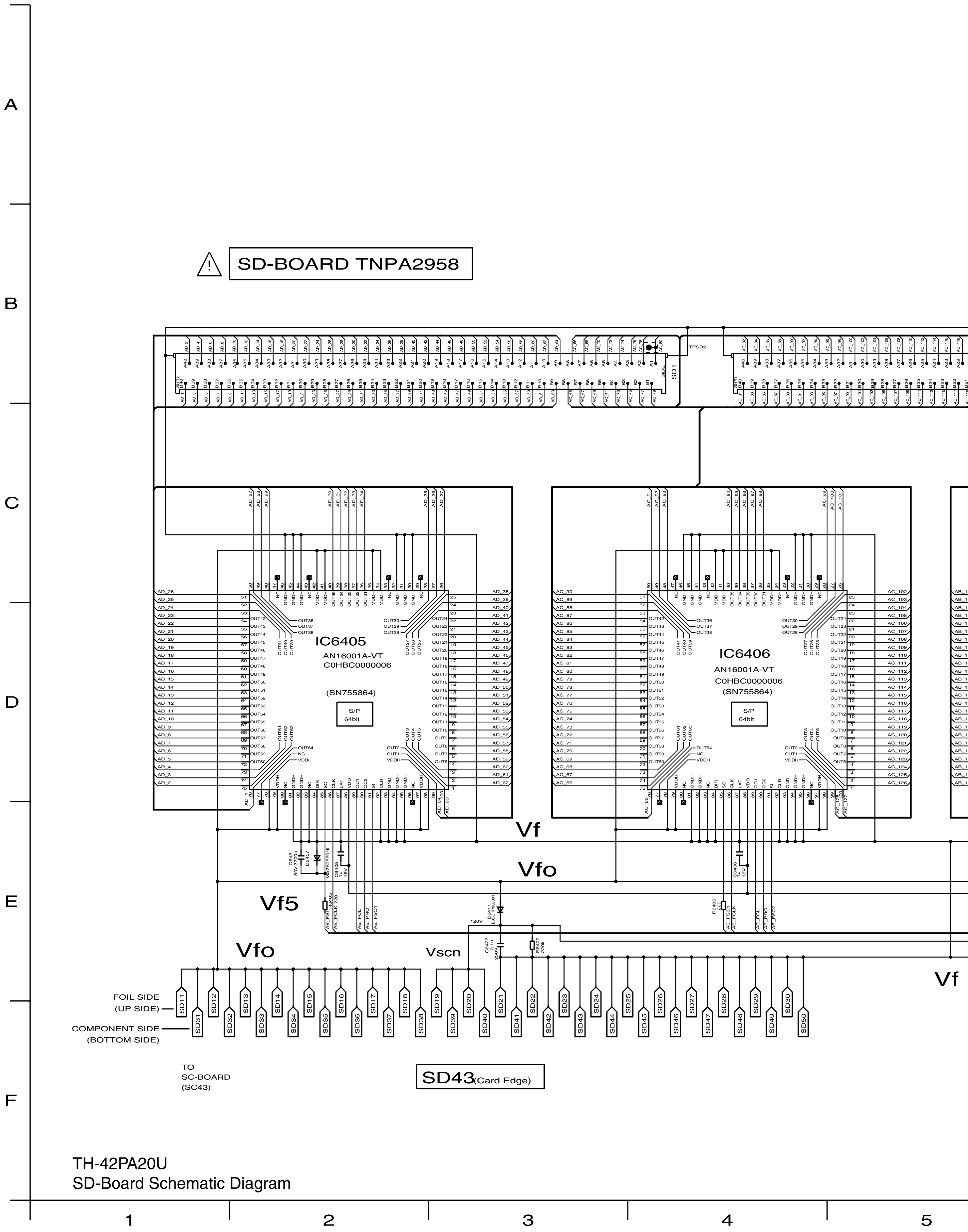
o 1st 80pins of
CAN ELECTRODES

o 2nd 80pins of
CAN ELECTRODES

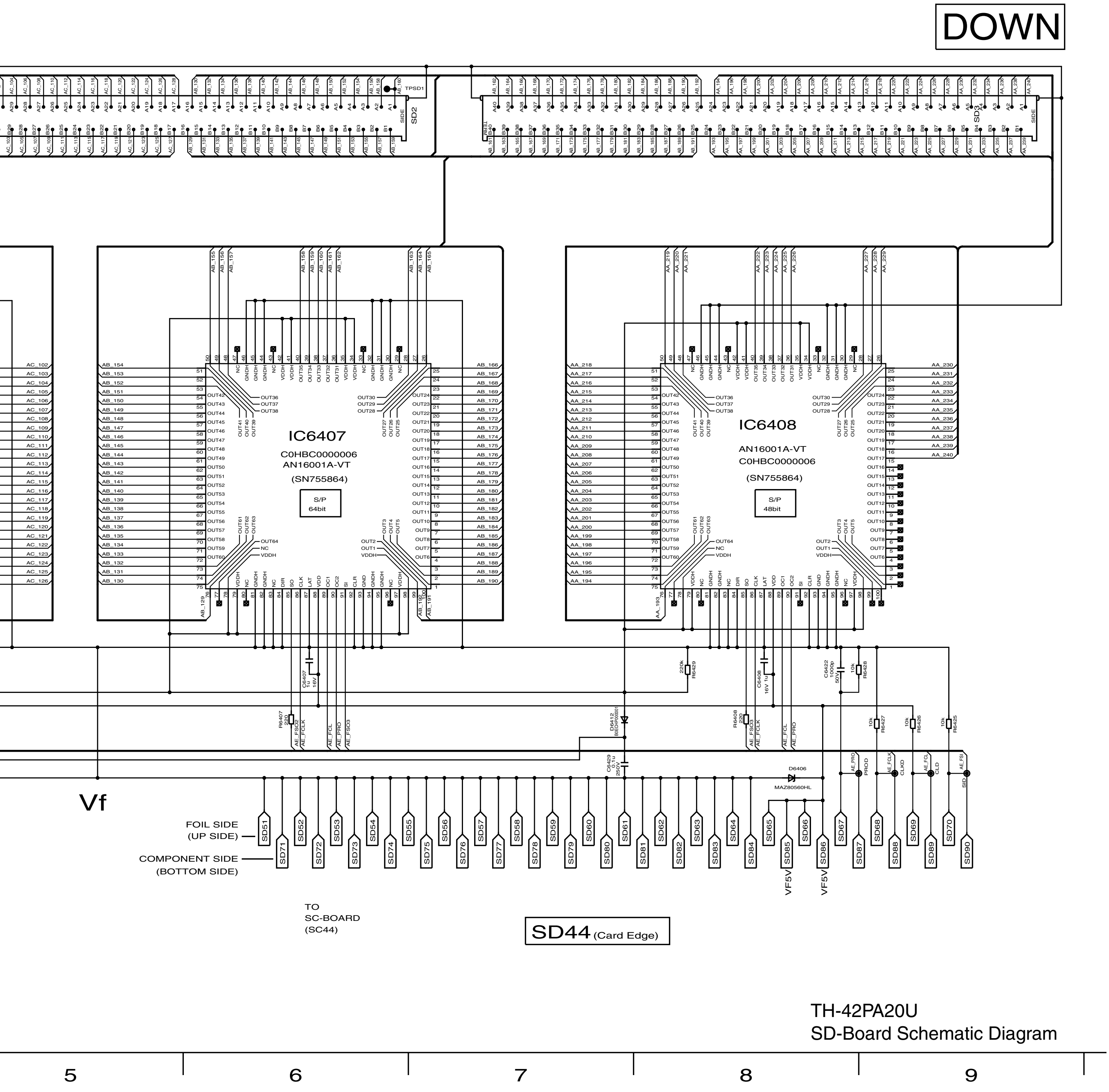
o 3rd 80pins of
CAN ELECTRODES

TH-42PA20U
SD-Board Block Diagram

14.45. SD-Board Schematic Diagram

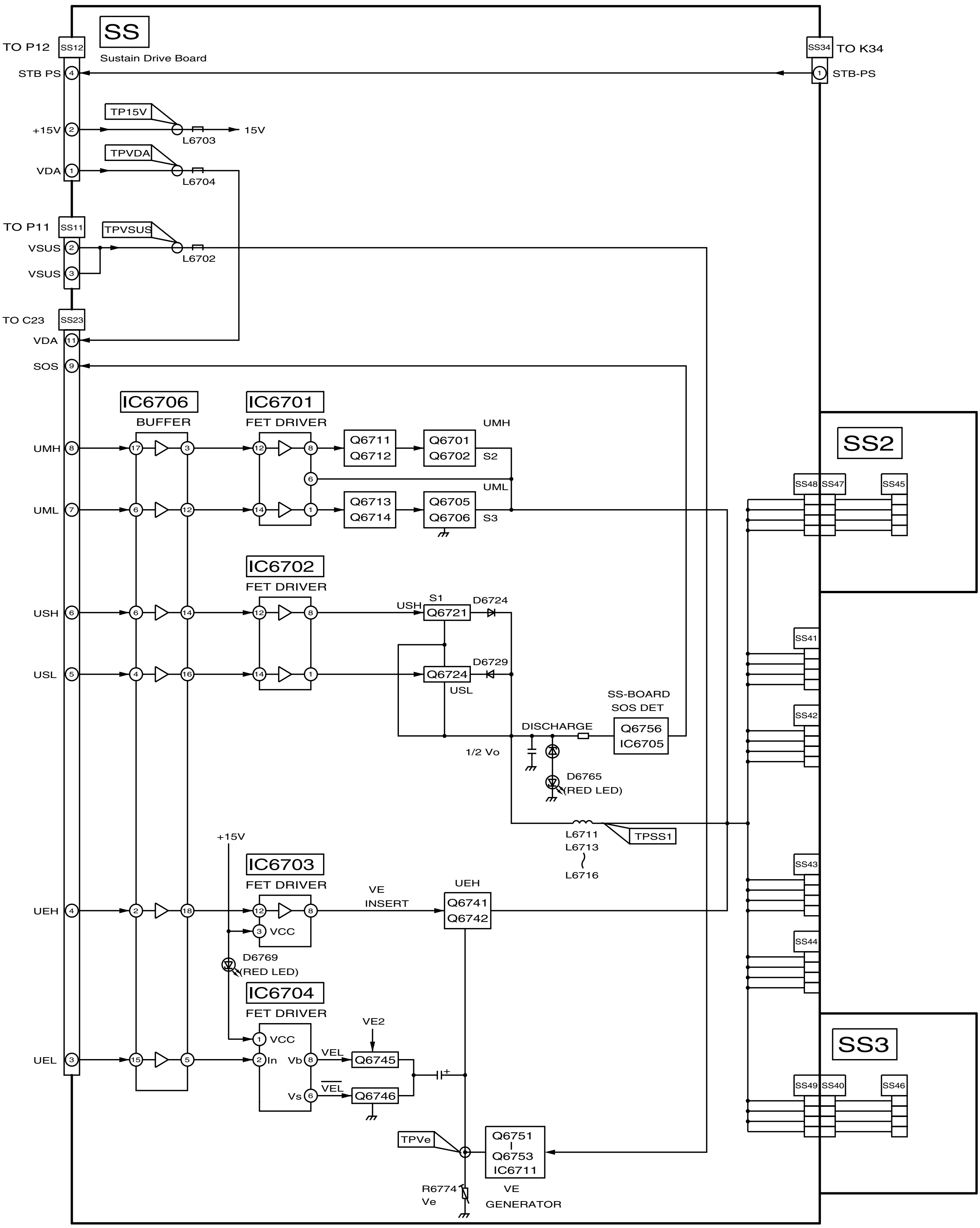

A
B
C
D
E
F
1
2
3
4
5
SD-BOARD TNPA2958
SD1
TPSD2
IC6405
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6406
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
Vf
Vfo
Vf5
Vfo
Vscn
Vf
C6421
D6407
C6405
R6405
D6411
C6427
R6409
C6406
R6406
120V
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
TO
SC-BOARD
(SC43)
SD43(Card Edge)
SD11
SD12
SD13
SD14
SD15
SD16
SD17
SD18
SD19
SD20
SD21
SD22
SD23
SD24
SD25
SD26
SD27
SD28
SD29
SD30
SD31
SD32
SD33
SD34
SD35
SD36
SD37
SD38
SD39
SD40
SD41
SD42
SD43
SD44
SD45
SD46
SD47
SD48
SD49
SD50

TH-42PA20U
SD-Board Schematic Diagram


DOWN
SD2
TPSD1
SIDE
SD3
IC6407
C0HBC0000006
AN16001A-VT
(SN755864)
S/P
64bit
IC6408
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
48bit
C6407
R6407
C6429
D6412
R6429
R6408
C6409
C6422
R6428
R6427
R6426
R6425
D6406
MAZ80560HL
AE_FSC2
AE_FCLK
AE_FCL
AE_PRO
AE_FSC3
PROD
CLKD
CLD
SID
Vf
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
SD51
SD52
SD53
SD54
SD55
SD56
SD57
SD58
SD59
SD60
SD61
SD62
SD63
SD64
SD65
SD66
SD67
SD68
SD69
SD70
SD71
SD72
SD73
SD74
SD75
SD76
SD77
SD78
SD79
SD80
SD81
SD82
SD83
SD84
SD85
SD86
SD87
SD88
SD89
SD90
VF5V
VF5V
TO
SC-BOARD
(SC44)
SD44 (Card Edge)
5
6
7
8
9

TH-42PA20U
SD-Board Schematic Diagram

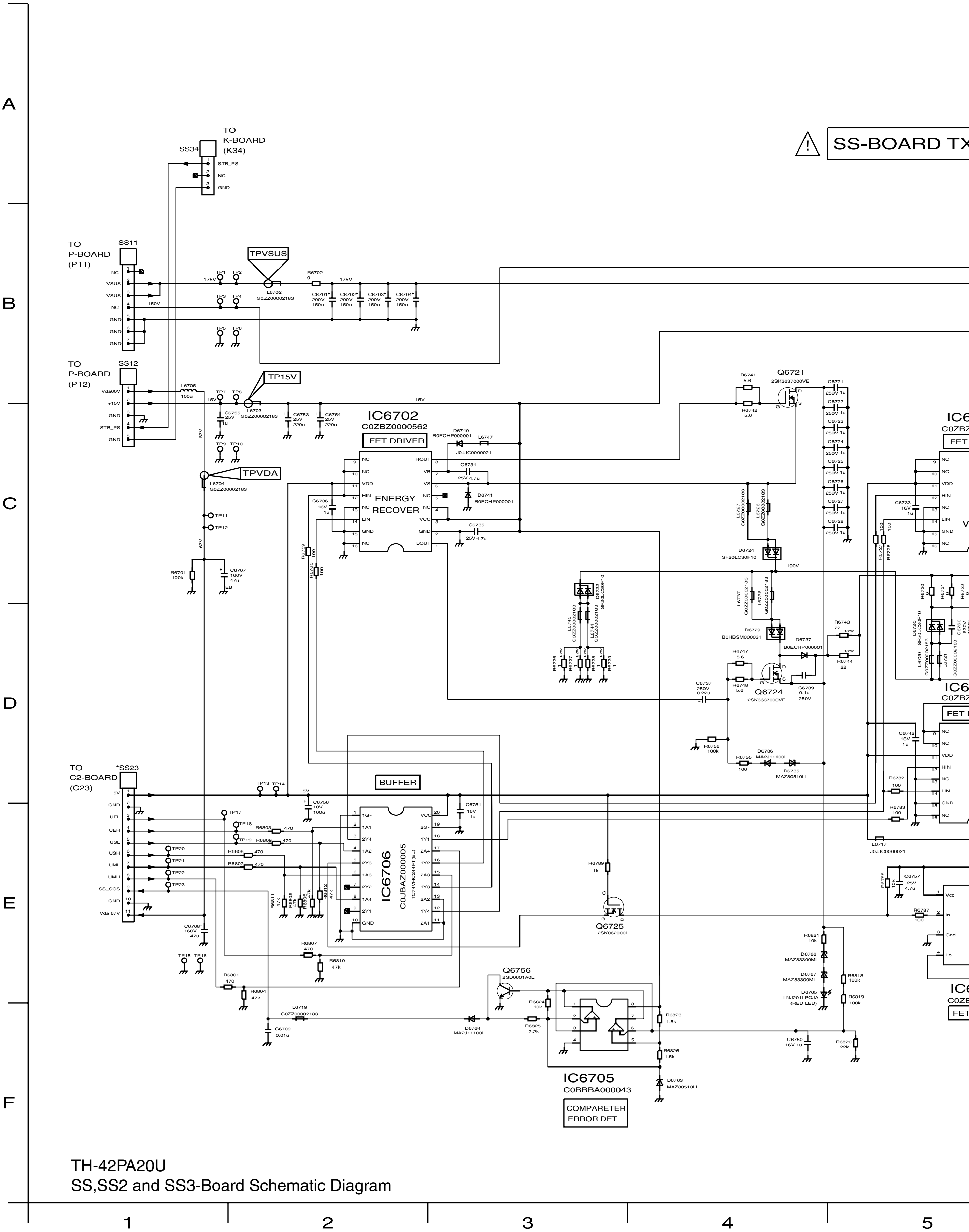
14.46. SS, SS2 and SS3-Board Block Diagram


SS
Sustain Drive Board
TO P12
SS12
STB PS
4
+15V
2
VDA
1
TP15V
L6703
15V
TPVDA
L6704
TO P11
SS11
VSUS
2
VSUS
3
TPVSUS
L6702
TO C23
SS23
VDA
11
SOS
9
SS34
TO K34
STB-PS
IC6706
BUFFER
IC6701
FET DRIVER
UMH
8
UML
7
Q6711
Q6712
Q6701
Q6702
S2
Q6713
Q6714
Q6705
Q6706
S3
IC6702
FET DRIVER
USH
6
USL
5
S1
Q6721
D6724
Q6724
D6729
SS-BOARD
SOS DET
DISCHARGE
Q6756
IC6705
1/2 Vo
D6765
(RED LED)
L6711
L6713
L6716
TPSS1
+15V
IC6703
FET DRIVER
VE
INSERT
UEH
Q6741
Q6742
UEH
4
VCC
D6769
(RED LED)
IC6704
FET DRIVER
VE2
UEL
3
VCC
In
Vb
Vs
VEL
Q6745
$\overline{VEL}$
Q6746
TPVe
Q6751
I
Q6753
IC6711
R6774
Ve
VE
GENERATOR
SS2
SS48
SS47
SS45
SS41
SS42
SS43
SS44
SS3
SS49
SS40
SS46

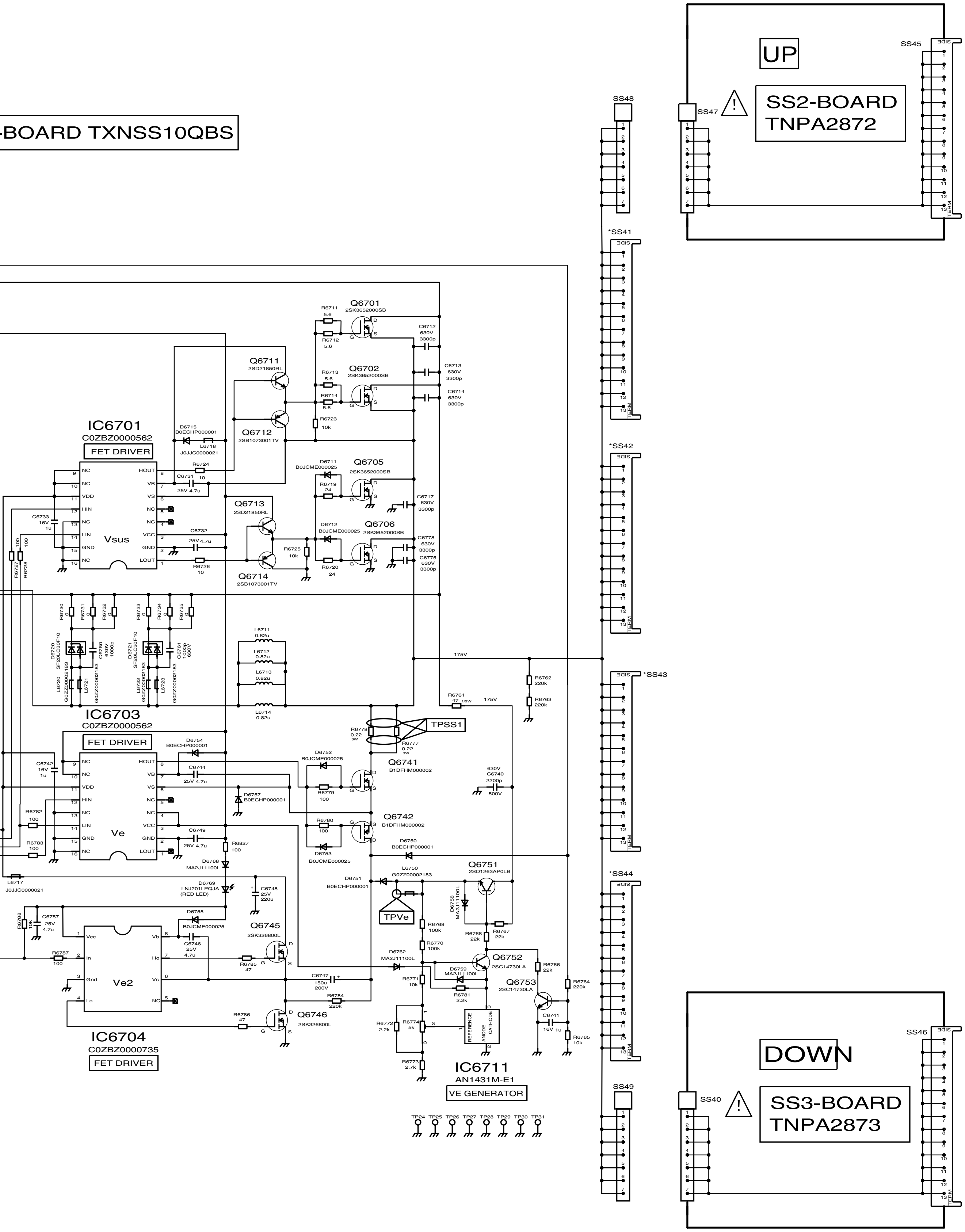
TH-42PA20U
SS,SS2 and SS3-Board Block Diagram

TH-42PA20U
SS,SS2 and SS3-Board Block Diagram

14.47. SS, SS2 and SS3-Board Schematic Diagram

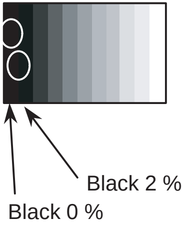
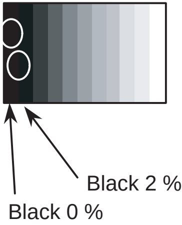

A
B
C
D
E
F
1
2
3
4
5
SS-BOARD TX
SS34
TO
K-BOARD
(K34)
STB_PS
NC
GND
SS11
TO
P-BOARD
(P11)
VSUS
150V
175V
TPVSUS
L6702
G0ZZ00002183
R6702
C6701
C6702
C6703
C6704
200V
150u
SS12
TO
P-BOARD
(P12)
Vda60V
+15V
L6705
100u
TP15V
L6703
C6755
C6753
C6754
TPVDA
L6704
67V
R6701
100k
C6707
160V
47u
IC6702
C0ZBZ0000562
FET DRIVER
ENERGY
RECOVER
HOUT
VB
VS
VCC
LOUT
HIN
LIN
VDD
D6740
B0ECHP000001
L6747
J0JJC0000021
C6734
25V 4.7u
D6741
C6735
C6736
R6759
R6760
Q6721
2SK3637000VE
R6741
5.6
R6742
5.6
C6721
C6722
C6723
C6724
C6725
C6726
C6727
C6728
250V 1u
L6727
L6726
D6724
SF20LC30F10
190V
D6722
SF20LC30F10
L6745
L6744
L6737
L6736
D6729
B0HBSM000031
D6737
B0ECHP000001
R6743
22
R6744
22
R6747
5.6
R6748
5.6
Q6724
2SK3637000VE
C6737
250V
0.22u
C6739
0.1u
250V
R6736
R6737
R6738
R6739
R6756
100k
R6755
100
D6736
MA2J11100L
D6735
MAZ80510LL
IC6
C0ZBZ
FET
C6733
16V
1u
R6727
R6728
R6730
R6731
R6732
D6720
SF20LC30F10
L6720
L6721
C6742
16V
1u
R6782
100
R6783
100
L6717
J0JJC0000021
TO
C2-BOARD
(C23)
*SS23
5V
GND
UEL
UEH
USL
USH
UML
UMH
SS_SOS
Vda 67V
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TP15
TP16
TP17
TP18
TP19
TP20
TP21
TP22
TP23
R6803
R6809
R6808
R6802
470
C6756
10V
100u
BUFFER
IC6706
C0JBAZ000005
TC74VHC244FT(EL)
C6751
16V
1u
R6811
R6805
R6806
R6812
47k
R6807
470
R6810
47k
R6801
470
R6804
47k
C6708
160V
47u
L6719
G0ZZ00002183
C6709
0.01u
R6789
1k
Q6725
2SK062000L
Q6756
2SD0601A0L
D6764
MA2J11100L
R6824
10k
R6825
2.2k
IC6705
C0BBBA000043
COMPARETER
ERROR DET
R6823
1.5k
R6826
1.5k
D6763
MAZ80510LL
R6821
10k
D6766
MAZ83300ML
D6767
MAZ83300ML
D6765
LNJ201LPQJA
(RED LED)
R6818
100k
R6819
100k
C6750
16V 1u
R6820
22k
R6788
C6757
25V
4.7u
R6787
100
Vcc
In
Gnd
Lo
IC6
C0ZB
FET

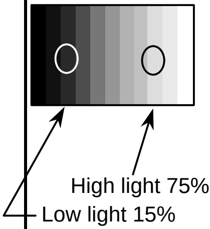
TH-42PA20U
SS,SS2 and SS3-Board Schematic Diagram


-BOARD TXNSS10QBS
UP
SS2-BOARD
TNPA2872
SS45
SS47
SS48
*SS41
*SS42
*SS43
*SS44
SS49
SS40
SS46
DOWN
SS3-BOARD
TNPA2873
IC6701
C0ZBZ0000562
FET DRIVER
Vsus
IC6703
C0ZBZ0000562
FET DRIVER
Ve
IC6704
C0ZBZ0000735
FET DRIVER
Ve2
IC6711
AN1431M-E1
VE GENERATOR
Q6701
2SK3652000SB
Q6702
2SK3652000SB
Q6705
2SK3652000SB
Q6706
2SK3652000SB
Q6711
2SD21850RL
Q6712
2SB1073001TV
Q6713
2SD21850RL
Q6714
2SB1073001TV
Q6741
B1DFHM000002
Q6742
B1DFHM000002
Q6745
2SK326800L
Q6746
2SK326800L
Q6751
2SD1263AP0LB
Q6752
2SC14730LA
Q6753
2SC14730LA
TPSS1
TPVe
175V
D6769
LNJ201LPQJA
(RED LED)
TP24
TP25
TP26
TP27
TP28
TP29
TP30
TP31

TH-42PA20U SS,SS2 and SS3-Board Schematic Diagram

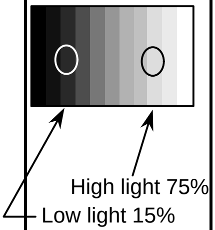
5 6 7 8 9

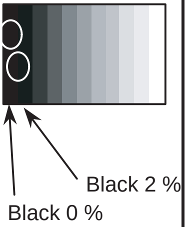
	INPUT	Equipment	Setting	Alignment menu	Procedure
1	RF Gray Scale Pattern 		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R cut off G cut off B cut off	** Adjust at the dark room. 1) Set R,G and B cut off to " **80** ".
				Chroma Control: Gun off	2) Set Gun off to "**5**". (Only green pixels can emit.)
				RGB Sub Adjust: G Sub Bright	3) Adjust G Sub bright 1 to start some of green pixels emission at black 2% area and no emission at black 0% area.
				Chroma Control: Gun off	4) Set Gun off to "**3**". (Only blue pixels can emit.)
				RGB Sub Adjust: B Sub Bright	5) Adjust B Sub bright 1 to start some of blue pixels emission at black 2% area and no emission at black 0% area.
				Chroma Control: Gun off	6) Set Gun off to "**6**". (Only red pixels can emit.)
				RGB Sub Adjust: R Sub Bright	7) Adjust R Sub bright 1 to start some of red pixels emission at black 2% area and no emission at black 0% area.
2	HD Gray Scale Pattern 		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change input to HD signal. 2) Repeat procedure 1) to 7) of Component input signal.

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	NTSC Gray Scale Pattern  	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright	1) Find the nearest area to brightness of 10 cd/m^2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m^2 exactly.
				PANEL W/B G cut off	3) Set G cut off to " 80 ".
				PANEL W/B B cut off R cut off	4) Adjust B and R cut off to set color temperature as shown Fig.-01.
				Sub Adjust Sub Bright	5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m^2.
					6)Find 75% of white area by color sensor.
				PANEL W/B G Drive	7) Set G Drive to " E8 ".
				PANEL W/B B Drive R Drive	8) Adjust B and R Drive to set color temperature as shown Fig.-01.
					9) Repeat item 4) to 7) to set both Low light and high light.
				PANEL W/B R,G,B Drive R,G,B Drive	10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC".
				PANEL W/B R,G,B cut off	11) Re-adjust Low light level again.
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

Color Temp.	x	y
Cool	0.276	0.276
Normal	0.288	0.296
Warm	0.313	0.329

Fig. -01

<table>
<tr><th></th><th>INPUT</th><th>Equipment</th><th>Setting</th><th>Alignment menu</th><th>Procedure</th></tr>
<tr><td>1</td><td rowspan="3">HD
Gray Scale
Pattern
 </td><td rowspan="3">Color
Analyzer</td><td>Picture:
Normal
White balance:
Cool
Aspect:
16:9</td><td>Sub Adjust
Sub Bright
PANEL W/B
G cut off
PANEL W/B
B cut off
R cut off
Sub Adjust
Sub Bright
PANEL W/B
G Drive
PANEL W/B
B Drive
R Drive
PANEL W/B
R,G,B Drive
R,G,B Drive
PANEL W/B
R,G,B cut off</td><td>1) Find the nearest area to brightness of 10 cd/m$_2$ as Low light by color sensor.
2) Adjust Sub bright to set Low light level to 10 cd/m$_2$ exactly.
3) Set G cut off to " 80 ".
4) Adjust B and R cut off to set color temperature as shown Fig.-04.
5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m$_2$.
6)Find 75% of white area by color sensor.
7) Set G Drive to " E8 ".
8) Adjust B and R Drive to set color temperature as shown Fig.-04.
9) Repeat item 4) to 7) to set both Low light and high light.
10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC".
11) Re-adjust Low light level again.
<table><tr><th>Color Temp.</th><th>x</th><th>y</th></tr><tr><td>Cool</td><td>0.276</td><td>0.276</td></tr><tr><td>Normal</td><td>0.288</td><td>0.296</td></tr><tr><td>Warm</td><td>0.313</td><td>0.329</td></tr></table>Fig. -04</td></tr>
<tr><td>2</td><td>Picture:
Normal
White balance:
Normal
Aspect:
16:9</td><td>PANEL W/B
R,G,B cut off
PANEL W/B
R,G,B Drive</td><td>1) Change white balance to "Normal".
2) Repeat procedure 3) to 11) of Cool mode.</td></tr>
<tr><td>3</td><td>Picture:
Normal
White balance:
Warm
Aspect:
16:9</td><td>PANEL W/B
R,G,B cut off
PANEL W/B
R,G,B Drive</td><td>1) Change white balance to "Warm".
2) Repeat procedure 3) to 11) of Cool mode.</td></tr>
<tr><td>4</td><td></td><td></td><td>Picture:
Normal
White balance:
Cool
Aspect:
16:9</td><td>Picture Menu
Sub Adjust
Sub Bright</td><td>1) Change color templature to "Cool".
2)Re-set Sub bright to "30"</td></tr>
</table>

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	RF Gray Scale Pattern  		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
	HD Gray Scale Pattern				8) Change to HD signal. 9) Copy PAL All cut off data to HD mode.

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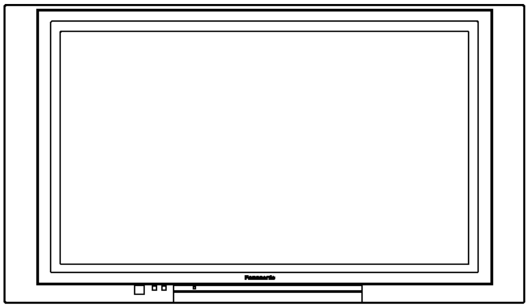
B19 Canada: B07

Service Manual

Progressive Plasma Television



TH-42PA20U-P

GP6DU Chassis

Specifications

Power Source	AC 120 V, 50/60 Hz		
Power Consumption	Maximum :425 W		
	Stand-by condition :0.8 W		
Plasma Display panel	Drive method :AC type 42-inch, 16 :9 aspect ratio		
Screen Size	36.22 " (920 mm) (W) × 20.39 " (518 mm) (H) × 41.57 " (1056 mm) (diagonal)		
Dimensions	46.06 " (1170mm) " 29.91 " (658 mm) × 3.90 " (99 mm)		
(W × H × D)			
Mass (Weight)	77.2 lb.(35.0 kg)Net		
Channel Capability-181	VHF-12 :UHF-56 :Cable-125		
Sound			
Speaker	Woofer ϕ 1.57 " (40 mm) × 4 , Tweeter ϕ 1.38 " (35 mm)		
Audio Output	16 W [8 W +8 W] (10 % THD)		
Headphone	M3 (3.5 mm) Jack × 1		
FEATURES	Two screen display fuctions	3D Y/C FILTER	
	BBE VIVA	LINEAR PIP	
	CLOSED CAPTION	V-Chip	
Accessories Supplied	Remote control Transmitter	EUR7603ZC0	
	AA Battery × 2	Ferrite cores (large × 5, small × 5)	
	AC Cord	F type Antenna Adaptor (3C-2V × 2, 5C-2V × 2)	
	Pedestal	Fixing band	
Operating Conditions	Temperature : 34 °F - 104 °F (0° - 40°C)		
	Humidity : 20 % - 80 % (non-condensing)		
Connection Terminals	RGB input	D-SUB 15pin	R, G, B /0.7 Vp-p (75Ω)
			HD, VD /1.0 -5.0 Vp-p (high impedance)
	AV INPUT 1-3	VIDEO	1.0 Vp-p (75Ω)
		(Phono Jack Type)	
		S-VIDEO	Y :1.0 Vp-p (75Ω), C : 0.286 Vp-p (75Ω)
		(Mini DIN 4-pin)	
		AUDIO L-R	0.5 Vrms
		(Phono Jack Type × 2)	

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AV PROG.OUT	VIDEO (Phono Jack Type)	1.0 Vp-p (75Ω)
	AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
TO AUDIO AMP	AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
COMPONENT VIDEO	Y	1.0 Vp-p (including synchronization)
INPUT1-2	PB /PR	± 0.35 Vp-p
	AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms
DIGITAL IN INPUT	DVI 1.0	24 pin
	AUDIO L-R (Phono Jack Type × 2)	0.5 Vrms

Note:

Design and Specifications are subject to change without notice.Weight and Dimensions shown are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Applicable signals

VIDEO input

	signal name	horizontal frequency(kHz)	vertical frequency(Hz)
1	NTSC	15.73	59.94

Applicable input signals (* mark)

	signal name	horizontal frequency(kHz)	vertical frequency(Hz)	COMPONENT	PC	DVI
1	525 (480) /60i	15.73	59.94	*	*	
2	525 (480) /60p	31.47	59.94	*	*	*
3	1,125 (1,080) /60i	33.75	59.94	*	*	*
4	640 × 400 @70	31.47	70.00		*	
5	640 × 480 @60	31.47	59.94		*	
6	Macintosh13” (640 × 480)	35.00	66.67		*	
7	640 × 480 @75	37.50	75.00		*	
8	852 × 480 @60	31.50	60.00		*	
9	800 × 600 @60	37.88	60.32		*	
10	800 × 600 @75	46.88	75.00		*	
11	800 × 600 @85	53.67	85.06		*	
12	Macintosh16” (832 × 624)	49.73	74.55		*	
13	1,024 × 768 @60	48.36	60.00		*	
14	1,024 × 768 @70	56.48	70.07		*	
15	1,024 × 768 @75	60.02	75.03		*	
16	1,024 × 768 @85	68.68	85.00		*	
17	Macintosh21” (1,152 × 870)	68.68	75.06		*	
18	1,280 × 1,024 @60	63.98	60.02		*	
19	1,280 × 1,024 @75	79.98	75.03		*	
20	1,280 × 1,024 @85	91.15	85.02		*	
21	1,600 × 1,200 @60	75.00	60.00		*	

Note: Signals without above specification may not be displayed properly.

2 Safety Precautions

2.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

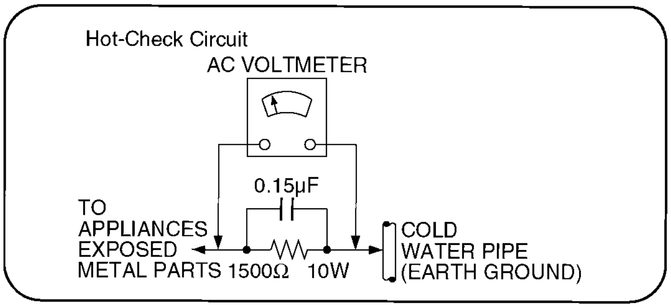

Hot-Check Circuit
AC VOLTMETER
0.15μF
TO APPLIANCES EXPOSED METAL PARTS
1500Ω 10W
COLD WATER PIPE (EARTH GROUND)

Figure 1

2.1.2. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

3 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4 About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

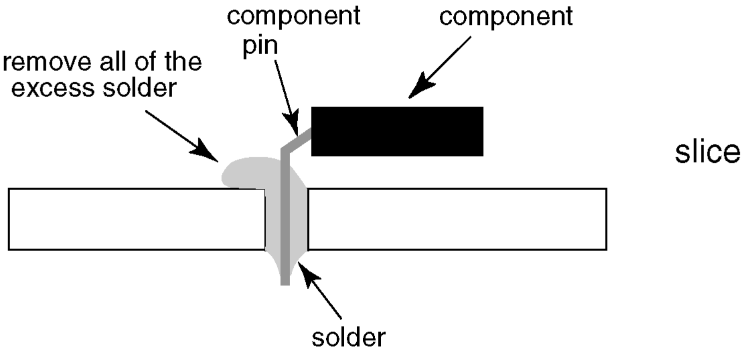
This model uses Pb Free solder in it’s manufacture due to environmental conservation issues. For service and repair work, we’d suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol PbF stamped on the back of PCB.

Caution

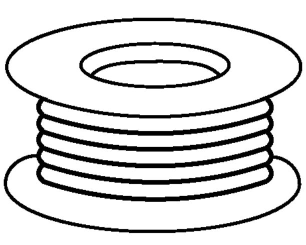
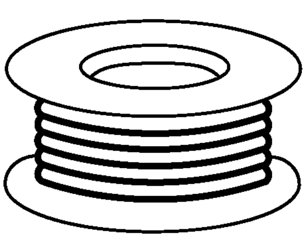
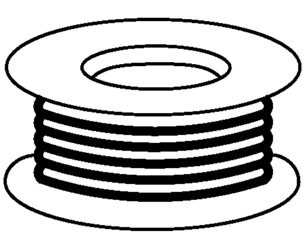
- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).

  If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



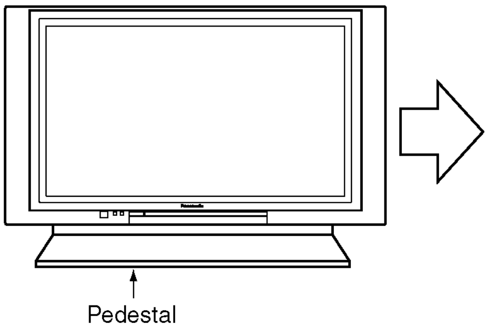
Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

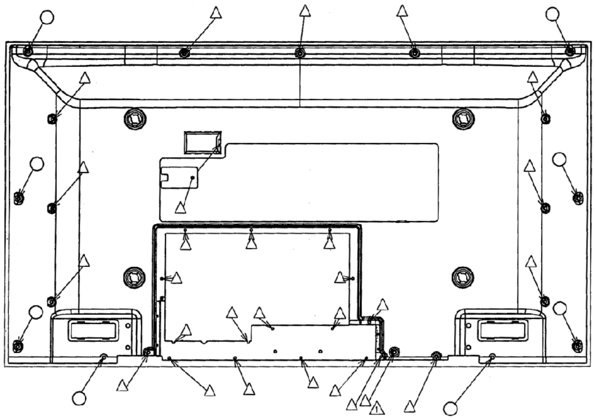
0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

5 Service Hint

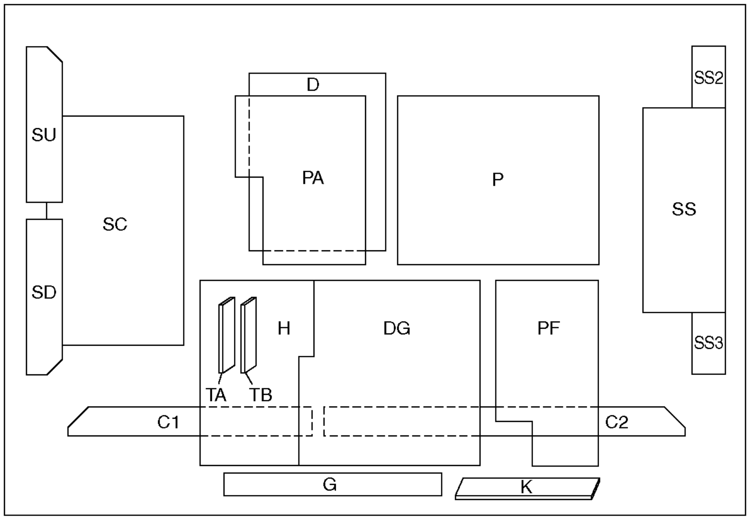
Stand the Unit used for Pedestal



Remove the Back Cover



Remove: 8 screws (△) XTB4+15AFZ
28 screws (○) THEL023Z

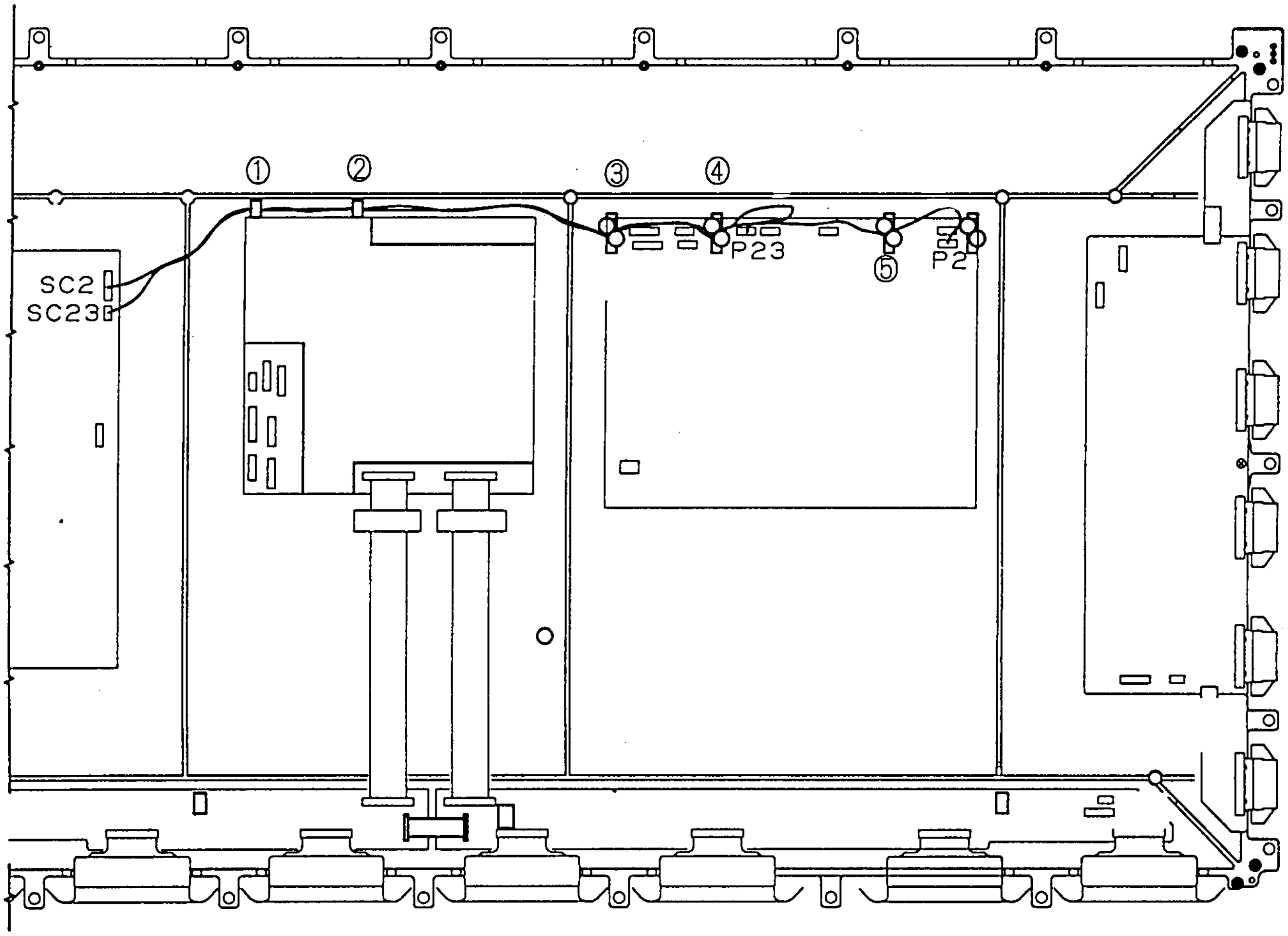


Service Position

Board Name	Function	Board Name	Function
C1	DATA DRIVER (RIGHT)	PF	LINE FILTER
C2	DATA DRIVER (LEFT)	SC	SCAN DRIVE
D	DIGTAL SIGINAL PROCESS	SD	SCAN OUT (DOWN)
DG	DIGTAL CORE MICOM	SS	SUSTAIN DRIVE
G	FRONT TERMINAL, SWITCH	SS2	SUSTAIN CONNECTION (UP)
H	REAE TERMINAL	SS3	SUSTAIN CONNECTION (DOWN)
K	LED, REMOTE, POWER SWITCH	SU	SCAN OUT (UP)
P	POWER SUPPLY	TA	MAIN TUNER
PA	DC/DC, AUDIO	TB	SUB TUNER

6 Location of Lead Wiring

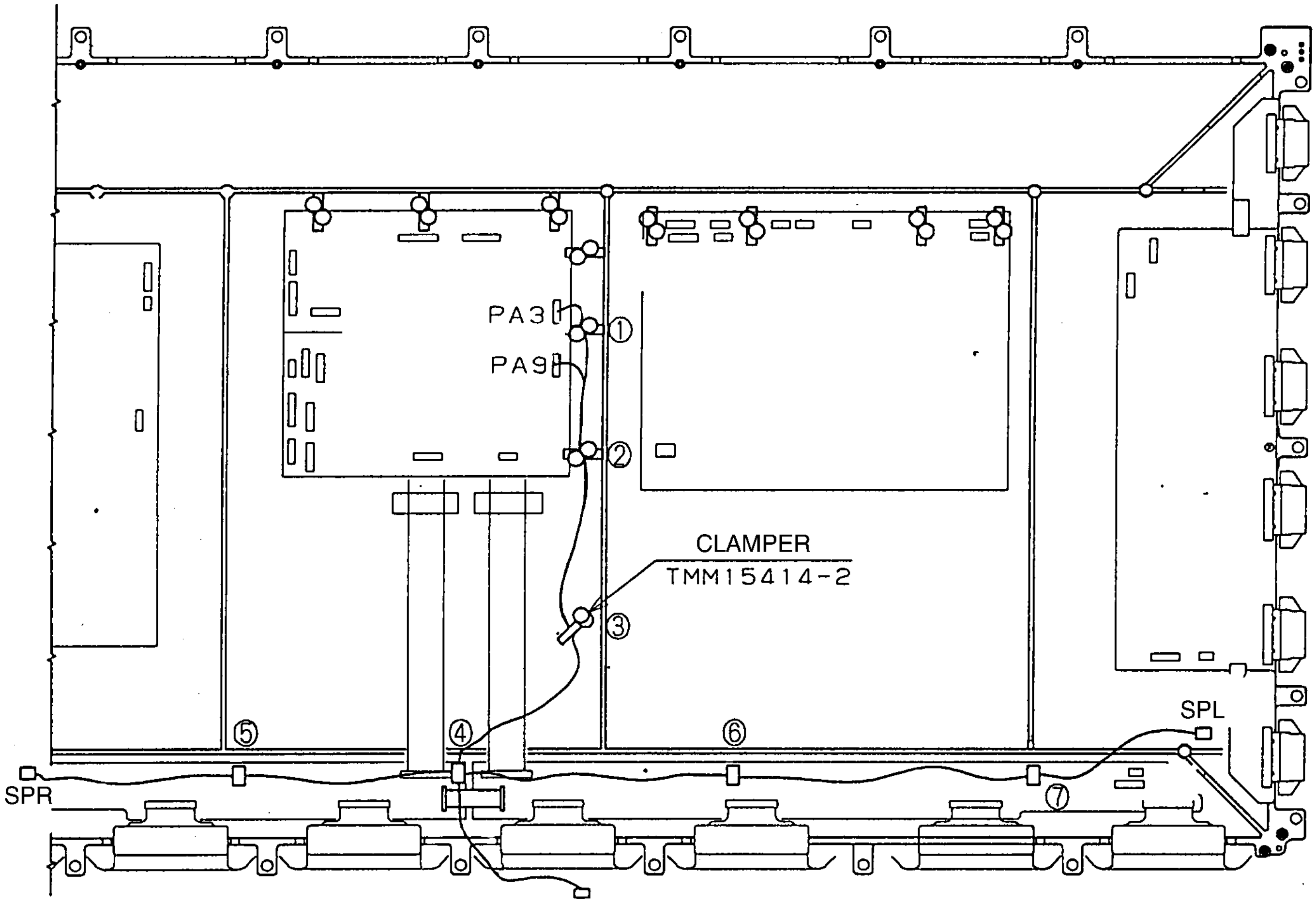
6.1. Lead of Wiring (1)


①
②
③
④
⑤
SC2
SC23
P23
P2

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥
SC2 —— P2	○	○	○	○	○	
SC23 —— P23	○	○	○	○		
——						

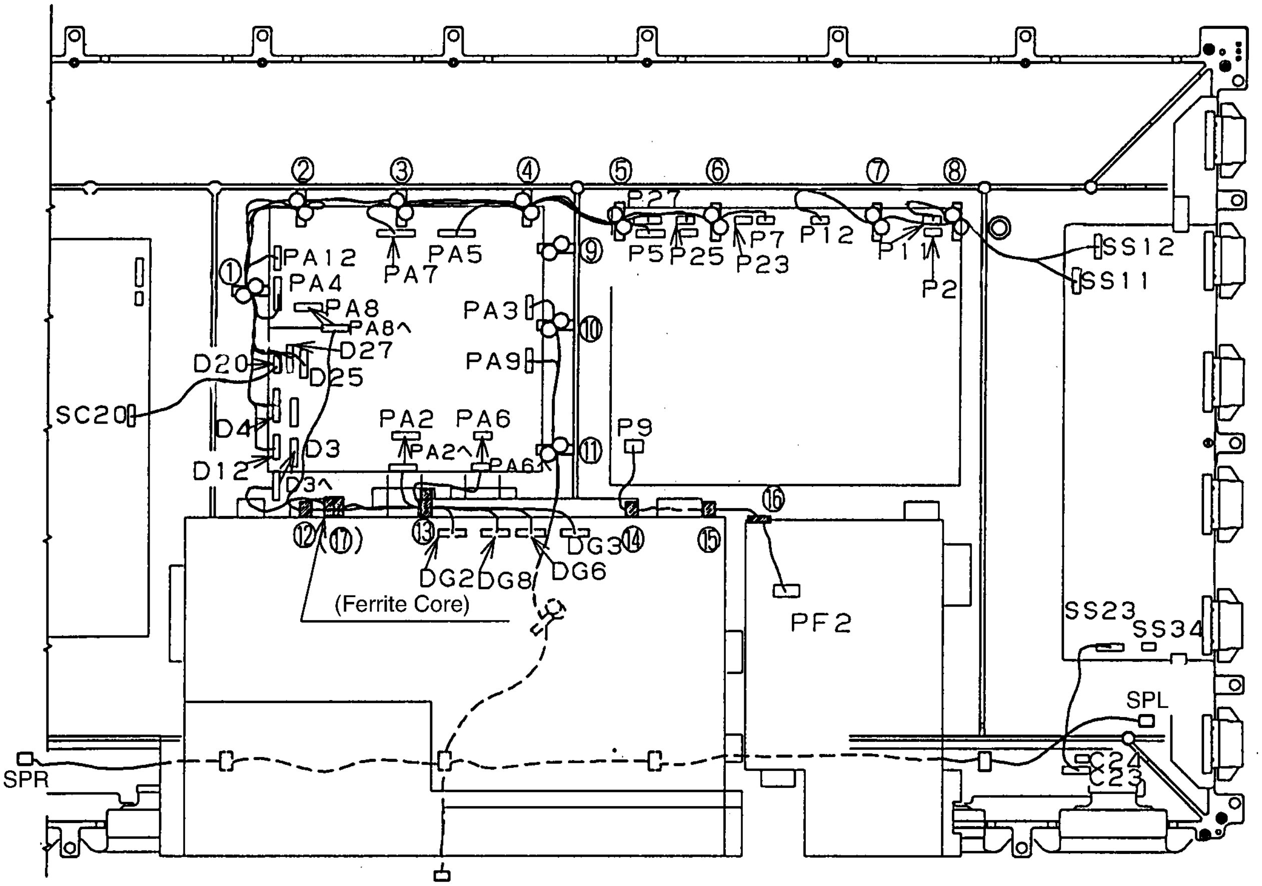
Connector Connection
P2、P23

6.2. Lead of Wiring (2)


PA3
①
PA9
②
CLAMPER
TMM15414-2
③
SPL
⑤
④
⑥
SPR
⑦

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥	⑦		
PA3 —— SPR	○	○	○	○	○				
PA3 —— SPL	○	○	○	○		○	○		
PA9 —— K9		○	○	○					

6.3. Lead of Wiring (3)

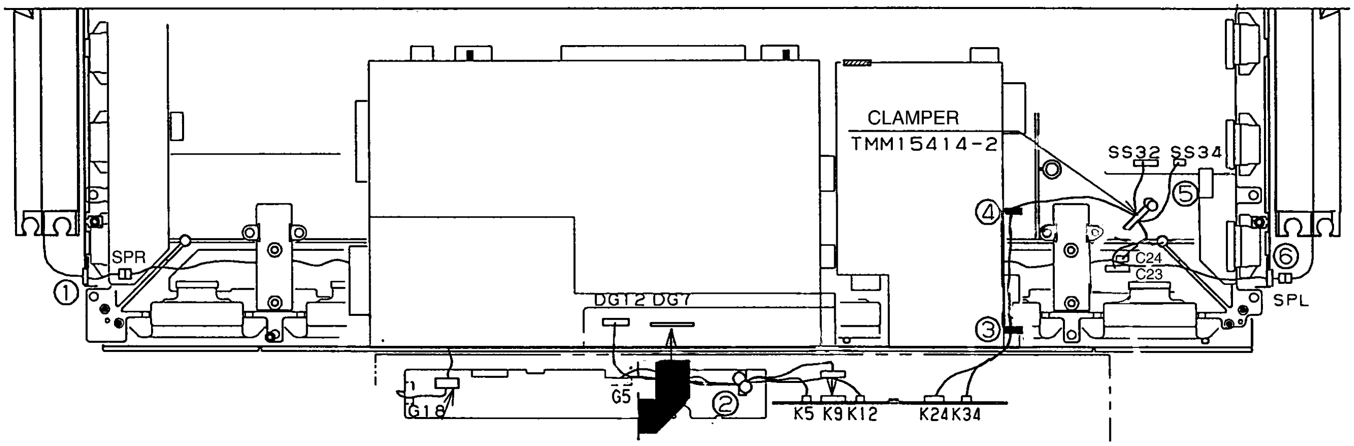

②
③
④
⑤
⑥
⑦
⑧
P27
PA12
①
PA4
PA7
PA5
⑨
P5
P25
P7
P23
P12
P11
P2
SS12
SS11
PA8
PA8^
PA3
⑩
D27
D20
D25
PA9
SC20
D4
D12
D3
D3^
PA2
PA6
PA2^
PA6^
⑪
P9
⑯
⑫
⑰
⑬
DG2
DG8
DG6
DG3
⑭
⑮
(Ferrite Core)
PF2
SS23
SS34
SPL
SPR
C24
C23

CON:NO. —— CON:NO.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰
SC20 —— D20																	
D12 —— PA12	○																
D4 —— PA4	●	●															
D25 —— P25	○	○	○	○	○												
D27 —— P27	○	○	○	○	○												
PA5 —— P5				○	○												
SS11 —— P11								○									
SS12 —— P12							○	○									
PA7 —— P7			○	○	○	○											
PF2 —— P9													○	○		○	
DG8 —— PA8												○	○				
SS23 —— C23																	
DG2 —— PA2													○				
DG6 —— PA6													○				
DG3 —— D3													○				○

Connector Connection
P2, P5, P11, P12, P23, P25
P27, P7, D20, D12, D4
D25, D27, D3
PA8, PA2, PA6, PA7, C23

● Wind up second times

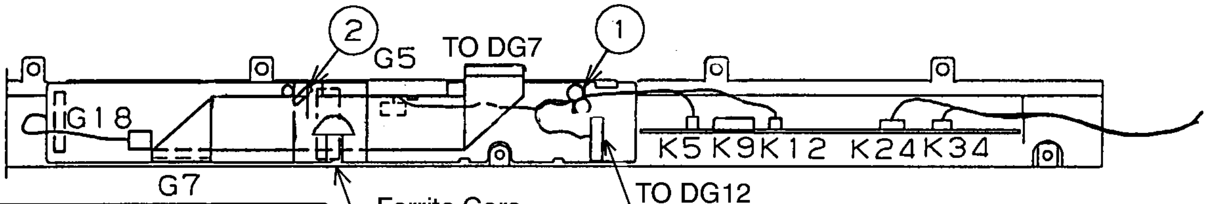
6.4. Lead of Wiring (4)


CLAMPER
TMM15414-2
SS32
SS34
④
⑤
SPR
①
C24
C23
⑥
SPL
DG12 DG7
③
G5
G18
②
K5 K9 K12
K24 K34

SS34, C24, SP (L、R)
DG12, DG7, G18, K9

CON:NO. - CON:NO.	①	②	③	④	⑤	⑥	○	○
PA9 - [K9]		○						
K12 - [DG12]		○						
K24 - [C24]			○	○	○			
K34 - [SS34]			○	○	○			
SS23 - [C23]					○			
PA3 - [SPR]	○							
PA3 - [SPL]					○	○		
G5 - K5		○						

6.5. Lead of Wiring (5)


②
G5
TO DG7
①
G18
K5 K9 K12 K24 K34
G7
Ferrite Core
TO DG12

CON:NO. -CON:NO.	①	②
K5-G5	○	
K12-DG12	○	
G7-DG7		○

Connector Connect
K5, K24, K34
G7, G18

7 Self-check Function

When symptoms like “the power fails sometimes” or “sometimes there is no picture and/or sound” can not be confirmed at the time of servicing, the self-check function can be used to confirm the occurrence and to find the defective circuit.

In case of “power failure”, flashing of the “POWER” indication (red) at the front of the unit can be used to narrow down the +B line.

7.1. Self-check of the microcomputer control system (bus line)

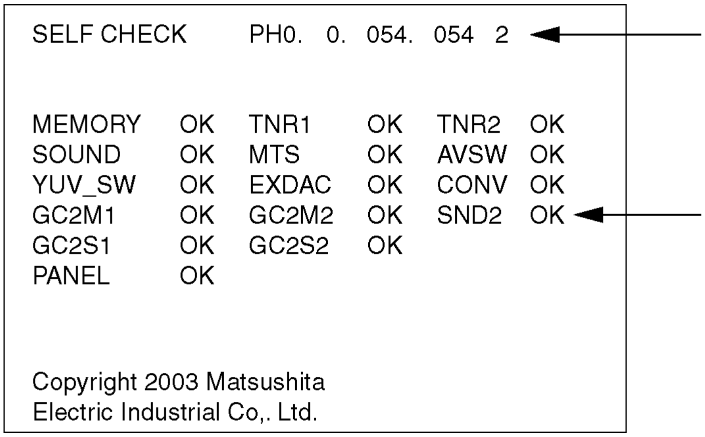
Indicaton method

Press the “ACTION” button in the control panel of the unit simultaneously with the “POWER” button in the control panel of the unit. Hold them few seconds.

Return to he normal screen

Press any button on the unit or in the remote control.

Screen Display



```
SELF CHECK      PH0.  0.  054.  054  2


MEMORY   OK   TNR1    OK   TNR2   OK
SOUND    OK   MTS     OK   AVSW   OK
YUV_SW   OK   EXDAC   OK   CONV   OK
GC2M1    OK   GC2M2   OK   SND2   OK
GC2S1    OK   GC2S2   OK
PANEL    OK



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Electric Industrial Co,. Ltd.
```

Version No. for Main MPU

Selfcheck result
OK: Normal
- - : Abnormal
(Check IC or its nearby components)

Display	Ref. No.	Description	Board
MEMORY	IC002	EEPROM for Main MPU	DG
SOUND	IC2401	Sound Control	H
YUV_SW	IC4301	YUV switch	H
GC2M1	IC4501	Global Core 2 for main	DG
GC2S1	IC4502	Global Core 2 for sub	DG
PANEL	- - - - -	Panel	- - - - -
TNR1	TNR201	Tuner 1	TA
MTS	IC4205	Multiplex sound	H
EXDAC	IC8031	External I/O	
GC2M2	IC4501	Global Core 2 for main	DG
GC2S2	IC4502	Global Core 2 for sub	DG
TNR2	TNR251	Tuner 2	TB
AVSW	IC4302	AV switch	H
CONV	IC3801	Convert Micom	DG
SND2	IC4203	BBE	H

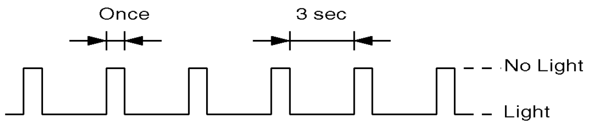
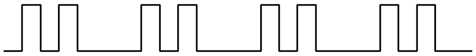
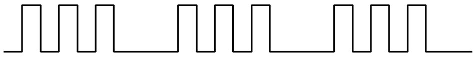
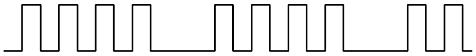
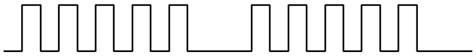
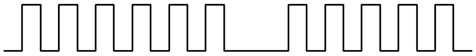
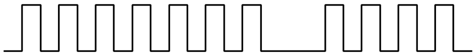
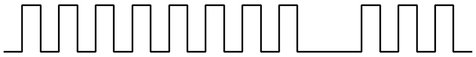
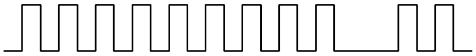
7.2. Power LED Blinking timing chart

1. Subject

   Information of LED Flashing timing chart.

2. Contents

   When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinkes of the Power LED on the front panel of the unit.

Blinking times	Blinking timing	Contents & Check point
1		Main Micom Power
2		SCAN Driver1
3		3.3V SOS
4		5V SOS
5		Power SOS
6		FAN
7		SCAN Driver2
8		TEMP (Not used)
9		SUS Driver

3. Remarks

   Above Fan function is operated during the fans are installed.

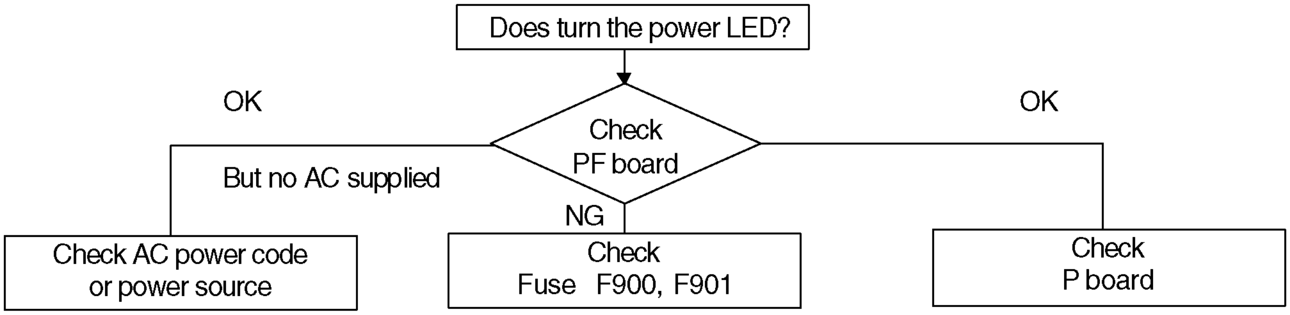
7.3. No Power

First check point

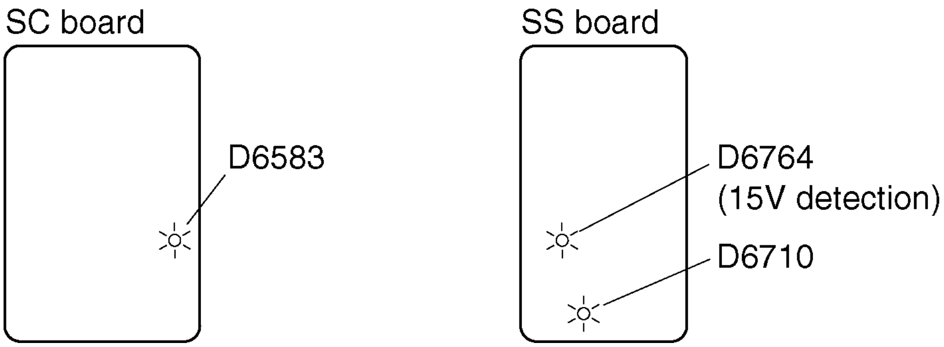
There are following 3 states of No Power indication by power LED.

1. No lit
2. Green is lit then turns red blinking a few seconds later.
3. Only red is lit.

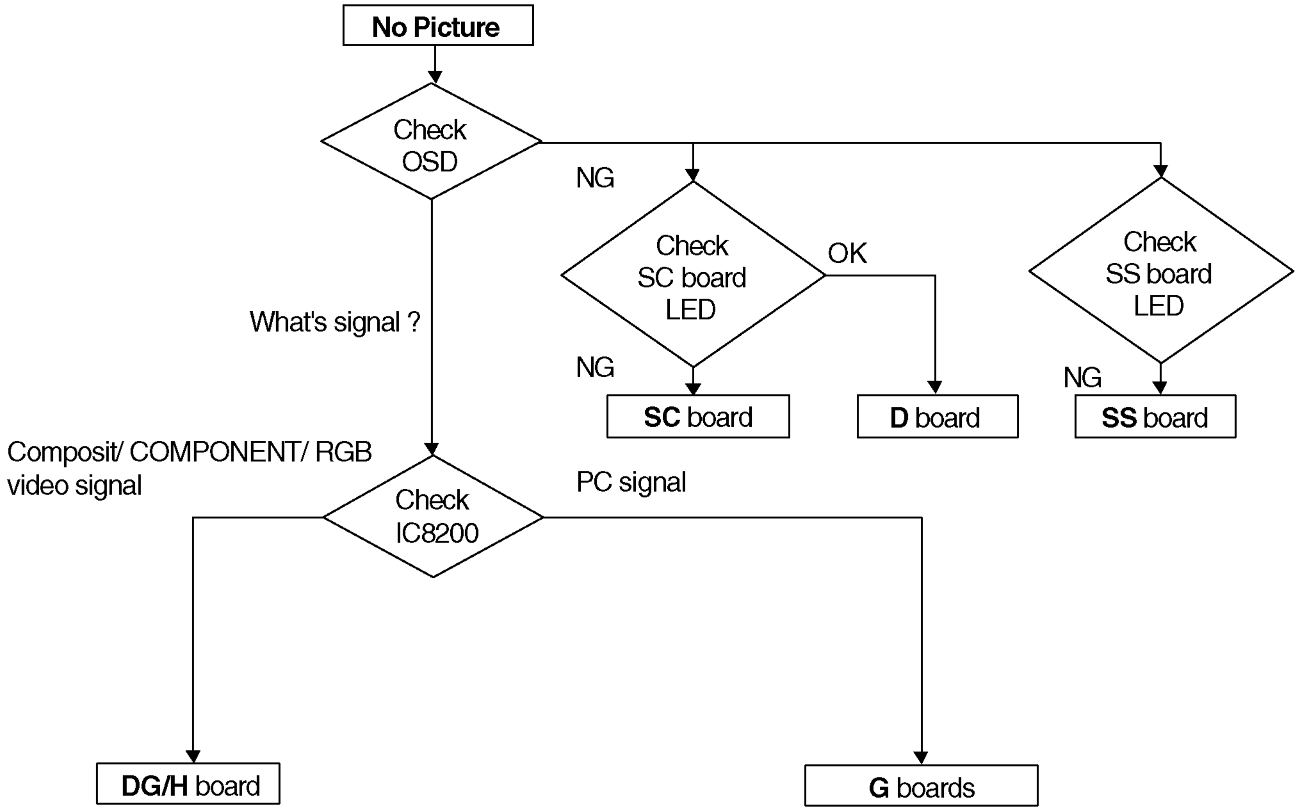
1. No lit


Does turn the power LED?
OK
Check PF board
OK
But no AC supplied
NG
Check AC power code or power source
Check Fuse F900, F901
Check P board

Drive circuits LED indicator

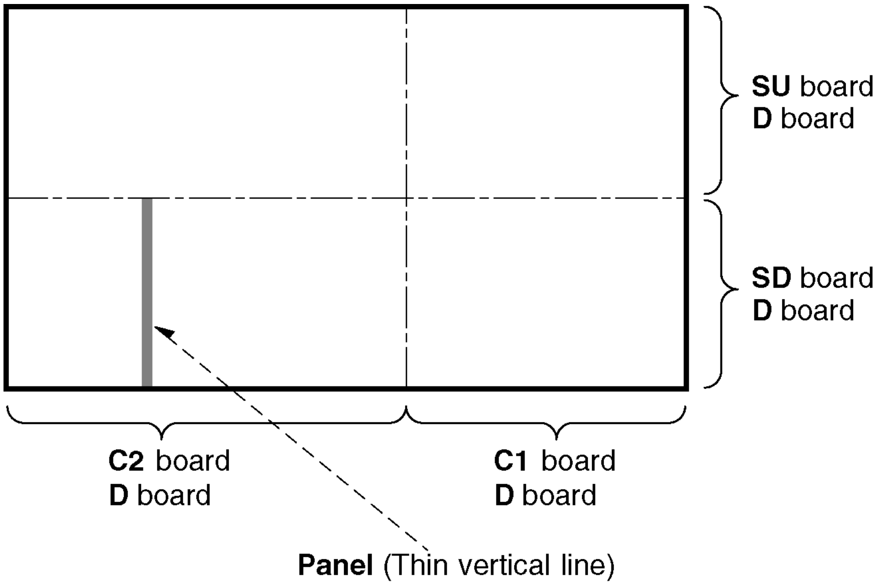

SC board
D6583
SS board
D6764
(15V detection)
D6710

7.4. No Picture


No Picture
Check OSD
NG
Check SC board LED
OK
Check SS board LED
What's signal ?
NG
SC board
D board
NG
SS board
Composit/ COMPONENT/ RGB video signal
Check IC8200
PC signal
DG/H board
G boards

7.5. Local screen failure

Plasma display may have local area failure on the screen. Fig - 1 is the possible defect P.C.B. for each local area.


SU board
D board
SD board
D board
C2 board
D board
C1 board
D board
Panel (Thin vertical line)

<Local screen failure chart>

Fig - 1

8 Serviceman Mode (Electronic Controls)

This Receiver has electronic technology using the I^{2}C BUS Concept. It performs as a control function and it replaces many mechanical controls. Instead of adjusting mechanical controls individually, many of the control function are now performed by using “On Screen Display Menu”. (The **Serviceman Adjustment Mode**.)

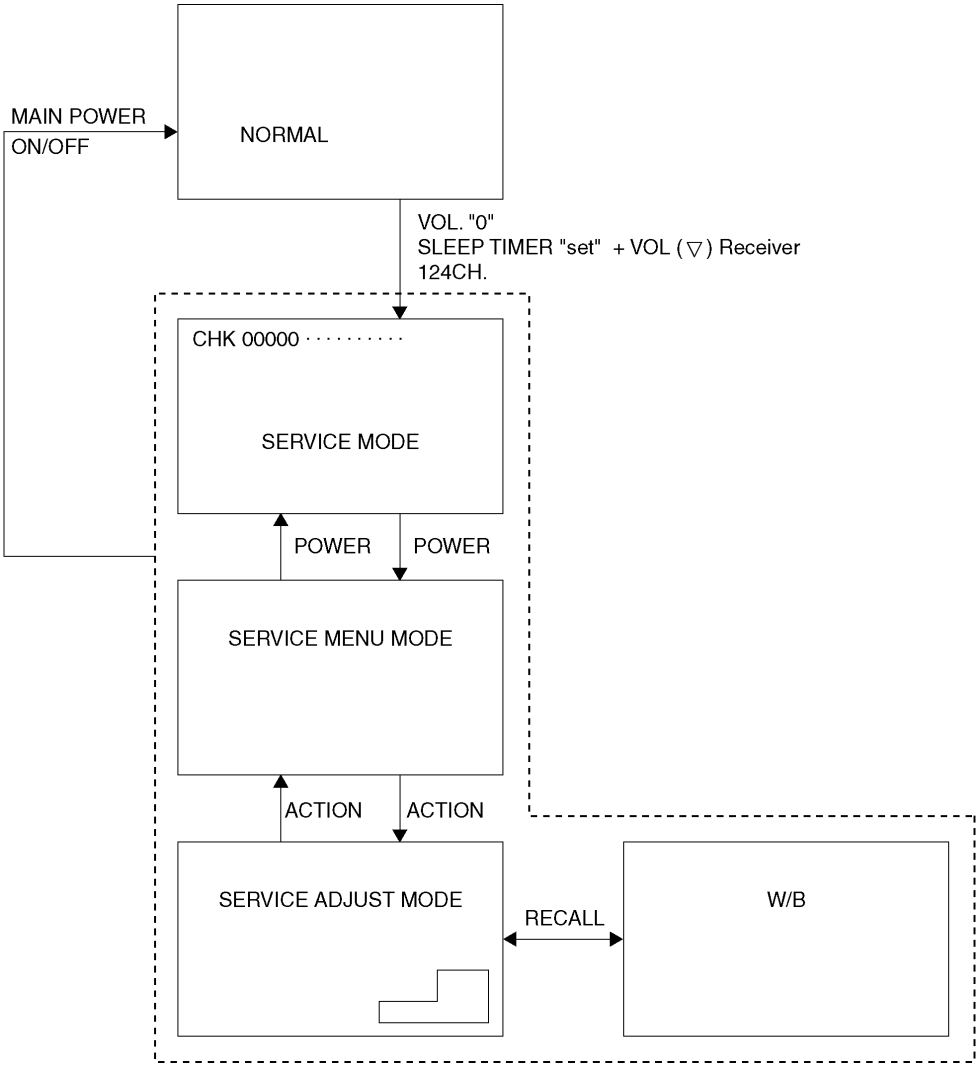
Note

It is suggested that the technician reads all the way through and understand the following the procedure for Entering/Exiting the **Serviceman Mode**; then proceed with the instructions working the Receiver. When becoming familiar with the procedure, the Flow Chart for Serviceman Mode may be used as a quick guide.

Quick Entry to Serviceman Mode:

At times when minor adjustments need to be done to the electronic controls, the method of Entering the serviceman Mode without removal of the cabinet back is as follows using the Remote Control:

1. Select SET-UP icon and select CABLE mode.
2. Select TIMER icon and set SLEEP time for 30 Min.
3. Press ACTION button twice to exit menus.
4. Tune to the Channel 124.
5. Adjust VOLUME to minimum (0).
6. Press the VOL ◀ button (decrease) **on Receiver**. Red “CHK” appears in upper corner.


MAIN POWER
ON/OFF
NORMAL
VOL. "0"
SLEEP TIMER "set" + VOL (▽) Receiver
124CH.
CHK 00000 · · · · · · · · · ·
SERVICE MODE
POWER
POWER
SERVICE MENU MODE
ACTION
ACTION
SERVICE ADJUST MODE
RECALL
W/B

To toggle between Aging and Serviceman modes:

While the “CHK” is displayed on the left top corner of the screen, pressing the Action and the Volume up button on the Receiver simultaneously will toggle between the modes. Red “CHK” for Serviceman and yellow “CHK” for Aging.

7. Press the Power Button on the Remote Control to select one of six Serviceman Adjustment Modes.
   a. Serviceman MTS ADJUSTMENT.
   b. Serviceman CLOCK ADJUSTMENT.
   c. Serviceman VIDEO ADJUSTMENT.
   d. Serviceman HDEF ADJUSTMENT.
   e. Serviceman VDEF ADJUSTMENT.
   f. Serviceman DAF ADJUSTMENT.
   g. Serviceman OTHER ADJUSTMENT.

> ***Note:*** *Only the applicable settings for the Receiver serviced will be available (See a in Fig.1).*

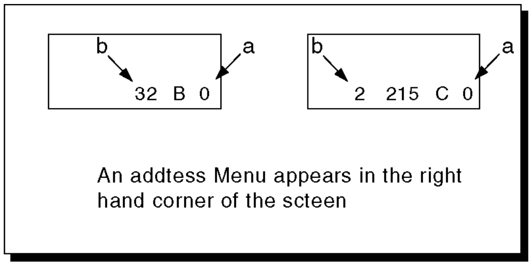

b
a
32 B 0
b
a
2 215 C 0
An addtess Menu appears in the right hand corner of the scteen

Figure 1. **Serviceman Mode Menu Adjustments.**

Exiting the Serviceman Mode:

Press the **Power** buttons on the **Receiver.**

For Adjustments:

1. **Press Channel Up/Down** on the **Remote Control** to select one of the available Service Adjustments (**a** in Fig.1).

   Note:

   Write Down the original value set (**b** in Fig.1) for each address before modifying anything. It is easy to erroneously adjust the wrong item.

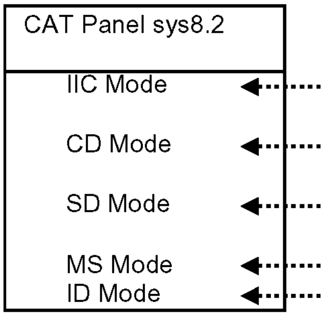
2. **Press Volume Up/Down** on the **Remote Control** to adjust the level of the selected Service Adjustment (**b** in Fig.1).

MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
MTS	MTSIN	10	3A		21
	SEPA L	10	3B		06
	SEPA H	10	3C		19
CLOCK	CLOCK	10	3D		128
VIDEO	COLOR	14	F2		19
	TINT	14	F6		88
	BRIGH	14	D4	01	FA
	CONT	14	D7		25
	B-Y_G	14	E0		3F
	CUT_G	15	0C	01	6C
	CUT_R	15	01	01	99
	CUT_B	15	13	01	A4
	BRT	14	D0		FB
	R DR	14	FB		9F
	B DR	15	00		A8
H	H POS	15	1C		CE
	H WID	15	1B		2B
	HP OF	15	61		FC

MAIN ITEM	SUB ITEM	ORIGINAL VALUE	EEPROM ADRESS		DEFAULT LEVEL
			SLEEVE	SUB	
	HW OF	15	60		00
V	V POS	15	1E		0C
	V WID	15			D1
	VP OF	15			20
	VW OF	15			29
OTHER	VMM_G	11	15		A0
	VMM_P	11	18		F3
	HHS	11	19		CB
	EW_SW	12	7B		00
	VTOP	12	59		86
	SOSSW	01	97		01
	POFWT	15	89		0A
	PSRVS				
	SPDYN	15	86		-00
EEP	AREA	15	9C		ALL
	IN ▶ EX	15	9D		
	EX ▶ IN	15	9E		

9 CAT (computer Aided Test) mode

CAT mode menu


CAT Panel sys8.2
IIC Mode
CD Mode
SD Mode
MS Mode
ID Mode

Mode	Function	Access button
IIC	Service Alignment	Action
CD(Complete Diagnostics)	Software version information EEPROM edit	Mute more than 5 seconds
SD(Status Display)	MTBF parameter	Action
MS Mode	Not use	-----
ID	Not use	-----

How to access the CAT mode.

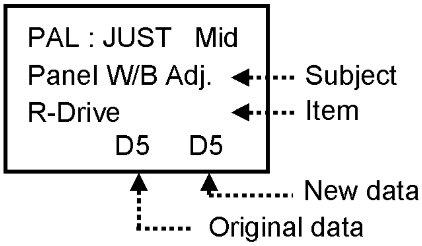
1. Enter the serviceman mode.
2. Select the OTHER (PSRVS).
3. Press the Action button on the remote control.

To exit the **CAT mode**, access the **ID mode** and switch off the main power.

9.1. IIC mode

Select the IIC mode by **Up/Down button** on the remote control at the front page of CAT mode then press the **Action button** on the remote control.

OSD


PAL : JUST Mid
Panel W/B Adj.
R-Drive
D5 D5
Subject
Item
New data
Original data

How to use the IIC mode.

1. Select the alignment **Subject** by **Up/Down buttons** on the remote control.
2 .Select the alignment **Item** by **Left/Right buttons** on the remote control.
3. Adjust **optimum setting** by **Volume Up/Down buttons** on the remote control.
4. The **data is memorized** when press the **R button** on the remote control or change the alignment Subject (or Items).

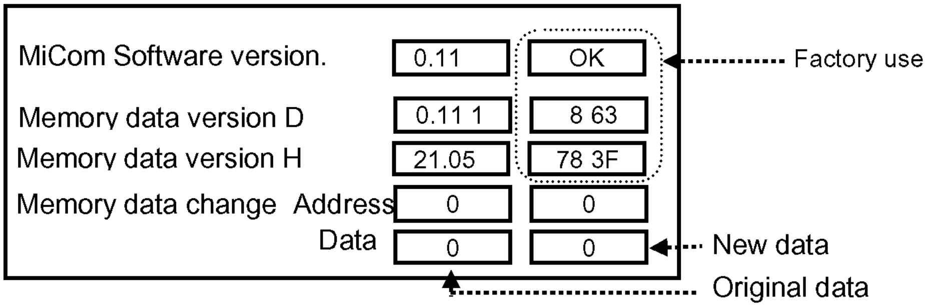
“IIC mode structure”.

To exit the IIC mode, press the **RECALL button** on the remote control.

9.2. CD mode

Select the CD mode by **Up/Down button** on the remote control at the front page of CAT mode then press the **Mute button** on the remote control more than 5 sec.

OSD



MiCom Software version. 0.11 OK

Memory data version D 0.11 1 8 63

Memory data version H 21.05 78 3F

Memory data change Address 0 0

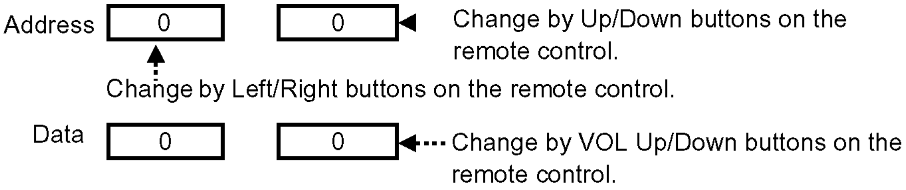
Data 0 0

Factory use
New data
Original data

Micom software version (IC9354), this version can be upgrade by

1. replace of new version IC
2. Loading the new version software from loader tool, TZSC07036.

Memory data change



Address
0
0
Change by Up/Down buttons on the remote control.
Change by Left/Right buttons on the remote control.
Data
0
0
Change by VOL Up/Down buttons on the remote control.

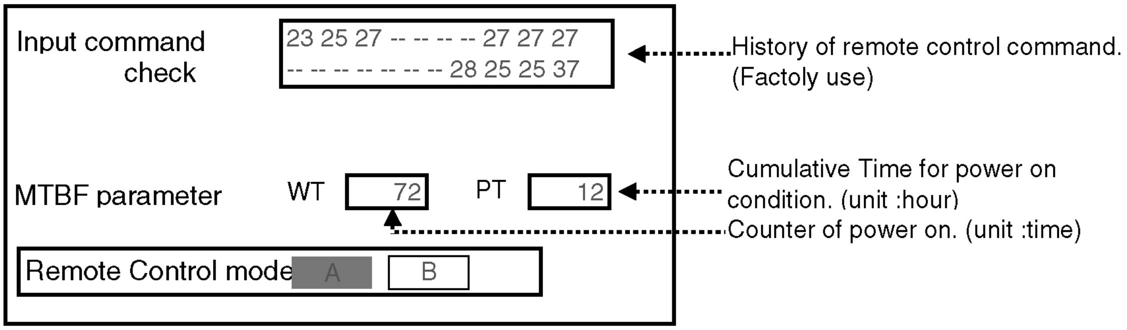
The data is memorized when switch off the main power.

To exit the CD mode, press the **RECALL button** on the remote control.

9.3. SD mode

Select the SD mode by Up/Down button on the remote control at the front page of CAT mode then press the Action button on the remote control.

OSD



Input command check 23 25 27 -- -- -- -- 27 27 27 -- -- -- -- -- -- -- 28 25 25 37

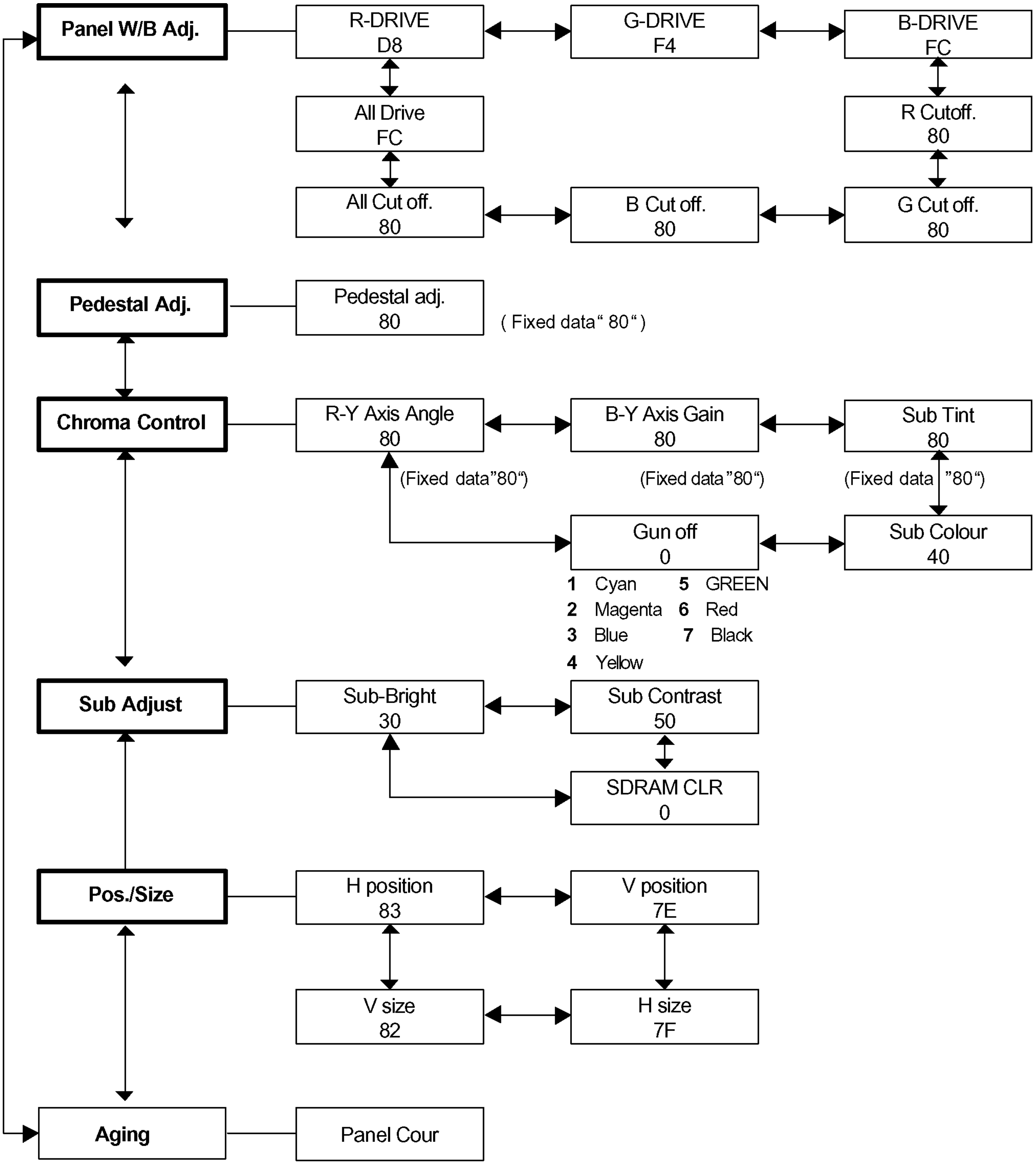
MTBF parameter WT 72 PT 12

Remote Control mode A B

History of remote control command.
(Factoly use)
Cumulative Time for power on condition. (unit :hour)
Counter of power on. (unit :time)

To exit the SD mode, press the **RECALL button** on the remote control.

9.4. IIC mode structure (following items value is sample data.)


Panel W/B Adj.
R-DRIVE
D8
G-DRIVE
F4
B-DRIVE
FC
All Drive
FC
R Cutoff.
80
All Cut off.
80
B Cut off.
80
G Cut off.
80
Pedestal Adj.
Pedestal adj.
80
(Fixed data“ 80“)
Chroma Control
R-Y Axis Angle
80
B-Y Axis Gain
80
Sub Tint
80
(Fixed data”80“)
(Fixed data”80“)
(Fixed data ”80“)
Gun off
0
Sub Colour
40
1 Cyan
2 Magenta
3 Blue
4 Yellow
5 GREEN
6 Red
7 Black
Sub Adjust
Sub-Bright
30
Sub Contrast
50
SDRAM CLR
0
Pos./Size
H position
83
V position
7E
V size
82
H size
7F
Aging
Panel Cour

0 WHITE
1 RED
2 GREEN
3 BLUE
4 SCROLL BAR
5 RAMP_W
6 RAMP_R
7 RAMP_G
8 RAMP_B

These are selected by Action button of Remote.

10 Adjustment Procedure

10.1. +B Set-up

10.1.1. Item / Preparation

1. Input a Grey scale signal.
2. Set the picture controls: -
   Picture mode: Normal
   White balance: Normal

10.1.2. Adjustment / Confirmation

Adjust and confirm indicated test point for the specified voltage.

Adjust

Name	Volume	Voltage	Test Point	Remarks
Vsus	R605	170V ± 1V	P11 pin 2	
Vda	R590	67V ± 0.5V	P12 pin 1	

Confirm

Name	Voltage	Test Point	Remarks
15V	15.4V ± 0.5V	P23 pin 1	
15V	15.2V ± 0.5V	P7 pin 1	
12V	11.8V ± 0.5V	P25 pin 1	
Audio 12V	12.5V ± 0.8V	P5 pin 7	
5V	5.1V ± 0.3V	P25 pin 5	
STB 5V	5.0V ± 0.3V	P27 pin 4	
Fan 15V	15.4V ± 0.5V	P10 pin 1	
Fan 5V	5.1V ± 0.3V	P10 pin 4	
PFC	380V ± 15V	C468(+), C468(-)	

10.2. Driver Set-up

10.2.1. Item / Preparation

1. Input an APL 100 % white signal.
2. Set the picture controls: -
   Picture mode: Normal
   White balance: Cool
   Aspect: 16:9

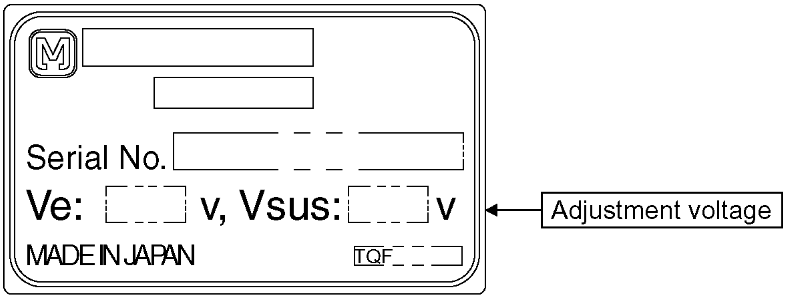
10.2.2. Adjustments

Adjust driver section voltages referring the panel data on the panel data label.

Name	Test Point	Voltage	Volume	Remarks
Vsus	TPVSUS (SS)	170V ± 1V	R605 (P)	
Vbk	TPVBK (SC)	155V ± 5V	R6443 (SC)	
Ve	TPVE (SS)	158V ± 1V	R6774 (SS)	
Vset	TPVSET (SC)	218V ± 6V	---	
Vad	TPVAD (SC)	-90V ± 1V	R6477 (SC)	
Vscn	TPVSCN (SC)	Vad*+118V ± 2V	---	
Vda	TPVDA (SS)	67V ± 1V	R590 (P)	

*See the Panel label.

Panel Label information

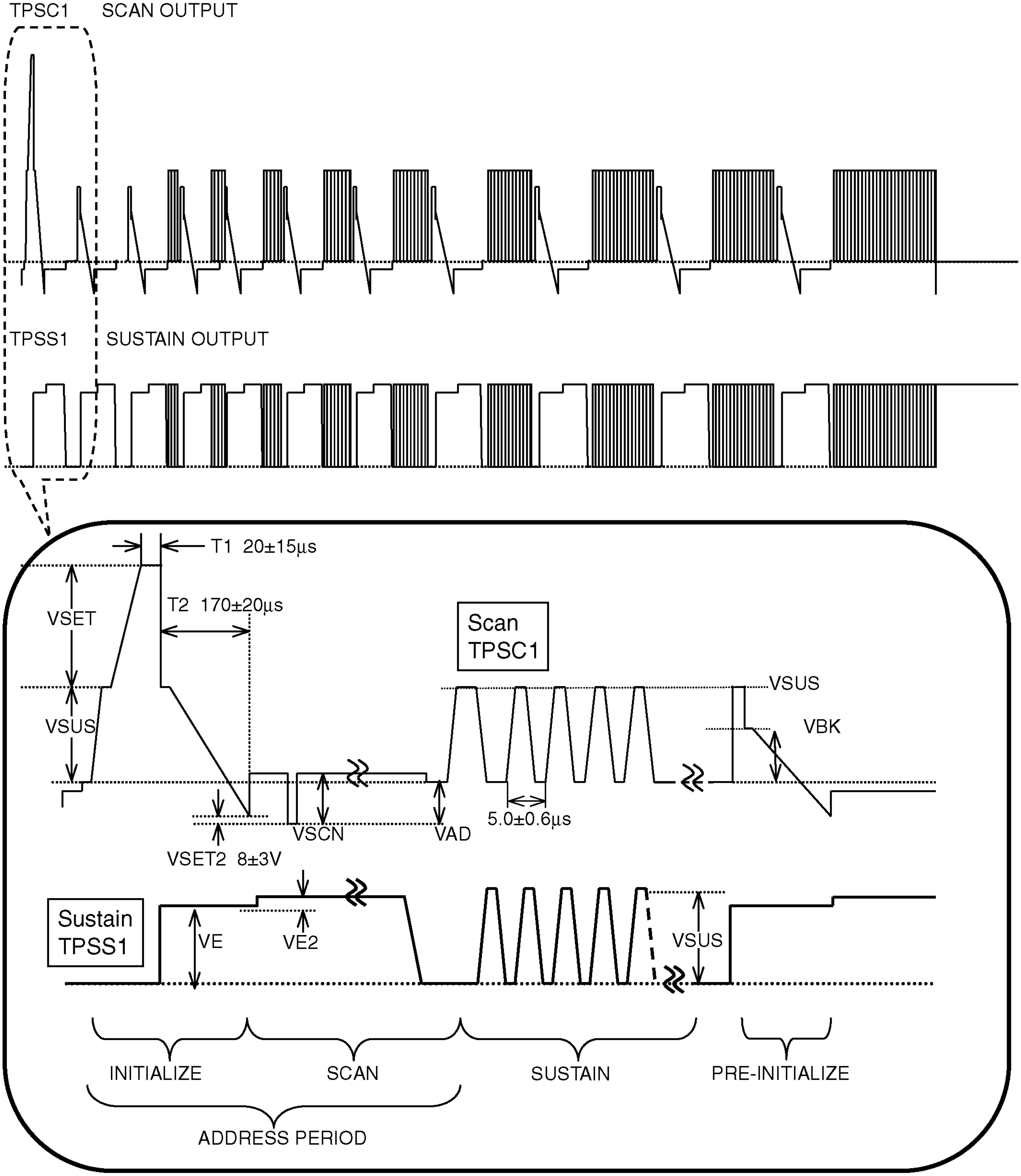


10.3. Initialization Pulse Adjust

1. Input a Cross hatch signal.
2. Set the picture controls: -
   Picture mode: Normal
   White balance: Cool

Adjust the indicated test point for the specified wave form.

	Test point	Volume	Level
T1	TPSC1 (SC)	R6523 (SC)	20 ± 15µ Sec
T2	TPSS1 (SS)	R6557 (SC)	170 ± 20µ Sec


TPSC1
SCAN OUTPUT
TPSS1
SUSTAIN OUTPUT
T1 20±15µs
T2 170±20µs
VSET
VSUS
Scan
TPSC1
VSUS
VBK
VSCN
VAD
5.0±0.6µs
VSET2 8±3V
Sustain
TPSS1
VE
VE2
VSUS
INITIALIZE
SCAN
SUSTAIN
PRE-INITIALIZE
ADDRESS PERIOD

10.4. P.C.B. (Printed Circuit Board) exchange

10.4.1. Caution

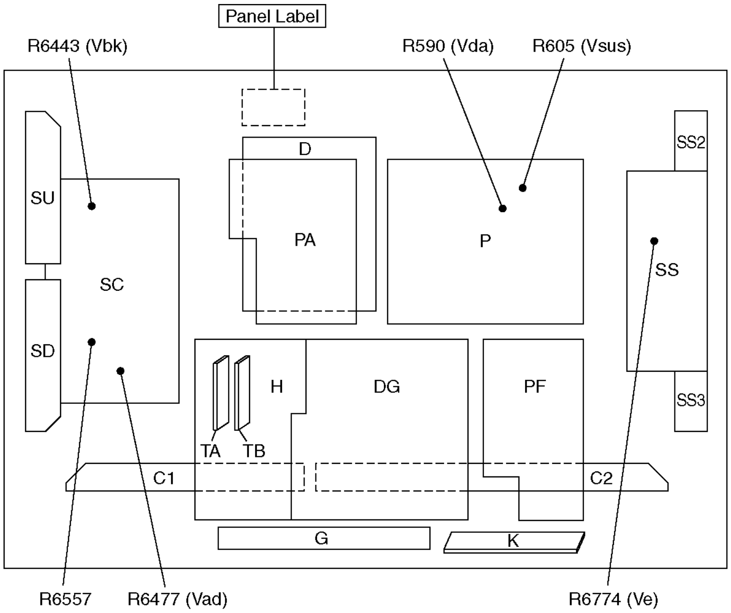
1. To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.

10.4.2. Quick adjustment after P.C.B. exchange

P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board	Vsus	TPVSUS (SS)	170V ± 1V	R605 (P)	
	Vda	TPVDA (SS)	67V ± 1V	R590 (P)	
SC Board	Vbk	TPVBK (SC)	155V ± 5V	R6443 (SC)	
	Vad	TPVAD (SC)	-90V ± 1V	R6477 (SC)	
	Vset	TPVSET (SC)	218V ± 6V	---	
	Vscn	TPVSCN (SC)	Vad + 118 ± 2V	---	
SS Board	Ve	TPVE (SS)	158V ± 1V	R6774 (SS)	
D, DG Board	White blance, Pedestal and Sub brightness for NTSC, PAL, HD, PC and 625i signals				

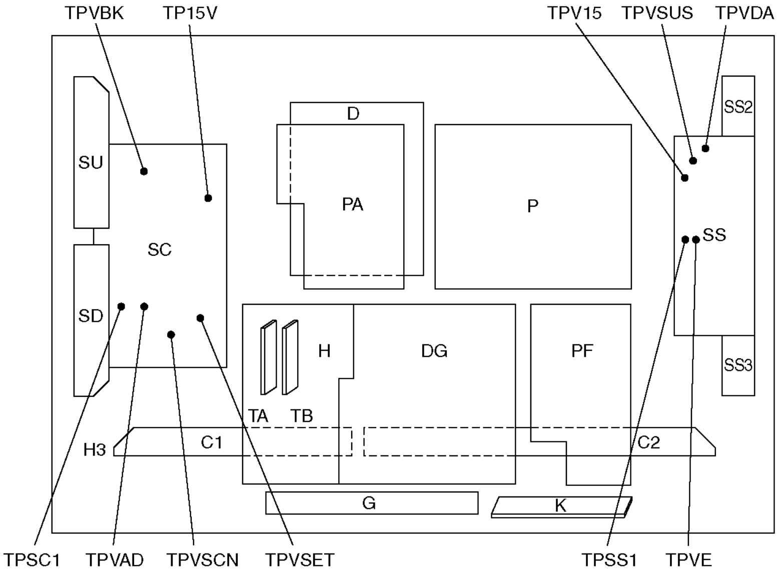
*See the Panel label.

10.5. Adjustment Volume Location



Panel Label
R6443 (Vbk)
R590 (Vda)
R605 (Vsus)
D
SS2
SU
PA
P
SS
SC
SD
H
DG
PF
SS3
TA
TB
C1
C2
G
K
R6557
R6477 (Vad)
R6774 (Ve)

10.6. Test Point Location

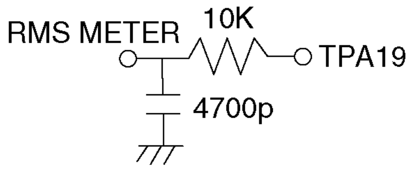


TPVBK
TP15V
TPV15
TPVSUS
TPVDA
D
SS2
SU
PA
P
SS
SC
SD
H
DG
PF
SS3
TA
TB
H3
C1
C2
G
K
TPSC1
TPVAD
TPVSCN
TPVSET
TPSS1
TPVE

11 Adjustment

11.1. MTS Adjustment

11.1.1. Input level Adjustment

Instrument name	Connection	Remarks
1. Filter jig 2. 2 RF signal generator 3. RMS voltage meter 4. Measurement computer	TP215 (L out) RF ANT. INPUT Filter jig SCL2, SDA2, FA2	

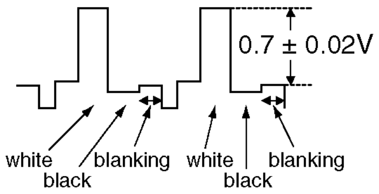
Procedure	Remarks
1. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,100% modulation ,monaural (70dB ± 5dB, 75 Ω OPEN, P/S 10dB) **Note:** Make sure 75us PRE-EMPHASIS is off. 2. Adjust "MTSIN" data (Input level) until the RMS voltage meter indicates 106mVrms ± 6mVrms.	

11.1.2. STERO Sep. Adjustment

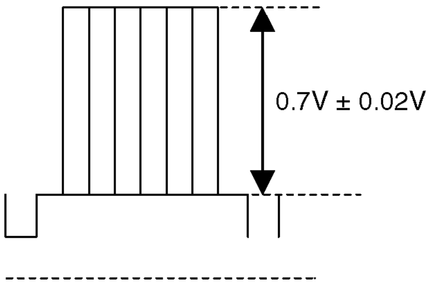
Instrument name	Connection	Remarks
1. RF signal generator 2. Oscilloscope 3. Measurement computer	RF ANT. INPUT TP216-GND SCL2, SDA2, FA2	

Procedure	Remarks
1. Select STEREO mode in the AUDIO Menu. 2. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 300Hz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB ,75Ω OPEN ,P/S 10dB) **Note:** After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on. 3. Adjust "SEPAL" data (Low-level separation) until the amplitude. 4. Apply following RF signal at Antenna input. VIDEO : Flat field , 30% modulation AUDIO : 3kHz ,30% modulation ,STEREO (LEFT only) (70dB ± 5dB, 75Ω OPEN, P/S 10dB) **Note:** After setting 30% modulation with P.L. SW and N.R. SW off, turn P.L. SW and N.R. SW on. 5. Adjust "SEPAH" data (High-level separation) until the amplitude of the waveform on the oscilloscope is minimum. 6. Repeat steps 2. to 5. until Low-level separation and High-level separation satisfy above-mentioned conditions.	The separation must be more than 20 dB at 300Hz and 3kHz.

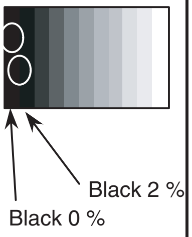
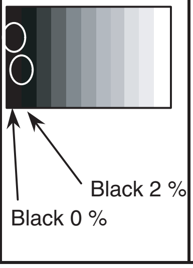
11.2. Sub contrast Adjustment (NTSC)

<table>
<tr><th colspan="3">Preparation</th></tr>
<tr><td colspan="3">Picture mode : VIVID (NORMAL SET)
Adjustment data : BRIGH, CONT
ACL OFF
WHITE CHARACTER CORRECTION OFF
COLOR OFF
VPK (V contour) OFF
DSC OFF
AI OFF
(NOTE) Don't operation ABL circuit when adjust sub contrast.</td></tr>
<tr><th>Instrument name</th><th>Connection</th><th>Remarks</th></tr>
<tr><td>1. Oscilloscope
2. Adjustment check RACK
3. Measurement computer</td><td>G out</td><td></td></tr>
<tr><th colspan="2">Procedure</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Apply a studio color bar. (Other method)
2. Adjust "CONT" data to obtain 0.7 ± 0.02 V between black and 1white.</td><td>< studio color bar >
 </td></tr>
</table>

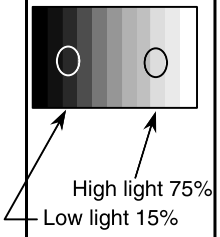
11.3. Sub contrast Adjustment (HDTV)

<table>
<tr><th colspan="3">Preparation</th></tr>
<tr><td colspan="3">Picture mode : VIVID (NORMAL SET)
Adjustment data : BRIGH, CONT
ACL OFF
WHITE CHARACTER CORRECTION OFF
COLOR OFF
VPK (V contour) OFF
DSC OFF
AI OFF
(NOTE) Don't operation ABL circuit when adjust sub contrast.</td></tr>
<tr><th>Instrument name</th><th>Connection</th><th>Remarks</th></tr>
<tr><td>1. Oscilloscope
2. Adjustment check RACK
3. Measurement computer</td><td>G out</td><td></td></tr>
<tr><th colspan="2">Procedure</th><th>Remarks</th></tr>
<tr><td colspan="2">1. Apply a HD crosshatch pattern.
2. Adjust "CONT" data to obtain 0.7 ± 0.02 V between black and white.</td><td>< HD crosshatch pattern >
 </td></tr>
</table>

11.4. Pedestal setting

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	RF Gray Scale Pattern 		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R cut off G cut off B cut off Chroma Control: Gun off RGB Sub Adjust: G Sub Bright Chroma Control: Gun off RGB Sub Adjust: B Sub Bright Chroma Control: Gun off RGB Sub Adjust: R Sub Bright	** Adjust at the dark room. 1) Set R,G and B cut off to " **80** ". 2) Set Gun off to "**5**". (Only green pixels can emit.) 3) Adjust G Sub bright 1 to start some of green pixels emission at black 2% area and no emission at black 0% area. 4) Set Gun off to "**3**". (Only blue pixels can emit.) 5) Adjust B Sub bright 1 to start some of blue pixels emission at black 2% area and no emission at black 0% area. 6) Set Gun off to "**6**". (Only red pixels can emit.) 7) Adjust R Sub bright 1 to start some of red pixels emission at black 2% area and no emission at black 0% area.
2	HD Gray Scale Pattern 		Picture: Normal White balance: **Cool** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change input to HD signal. 2) Repeat procedure 1) to 7) of Component input signal.

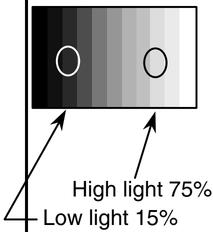
11.5. NTSC panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	NTSC Gray Scale Pattern 	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m^2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m^2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-01. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m^2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " E8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-01. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again.
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

Color Temp.	x	y
Cool	0.276	0.276
Normal	0.288	0.296
Warm	0.313	0.329

Fig. -01

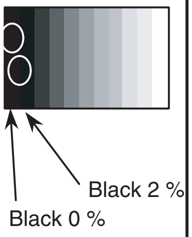
11.6. HD panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	HD Gray Scale Pattern 	Color Analyzer	Picture: Normal White balance: **Cool** Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m^2 as Low light by color sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m^2 exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set color temperature as shown Fig.-04. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m^2. 6)Find 75% of white area by color sensor. 7) Set G Drive to " E8 ". 8) Adjust B and R Drive to set color temperature as shown Fig.-04. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 color drive to "FC". 11) Re-adjust Low light level again.
2			Picture: Normal White balance: **Normal** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.
3			Picture: Normal White balance: **Warm** Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.
4			Picture: Normal White balance: **Cool** Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change color templature to "Cool". 2)Re-set Sub bright to "30"

Color Temp.	x	y
Cool	0.276	0.276
Normal	0.288	0.296
Warm	0.313	0.329

Fig. -04

11.7. Sub brightness setting

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	RF Gray Scale Pattern 		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. 1) Set white balance to **Cool**. 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to **Nornal**. 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to **warm**. 7) Adjust All cut off to set same data of Cool mode.
	HD Gray Scale Pattern				8) Change to HD signal. 9) Copy PAL All cut off data to HD mode.

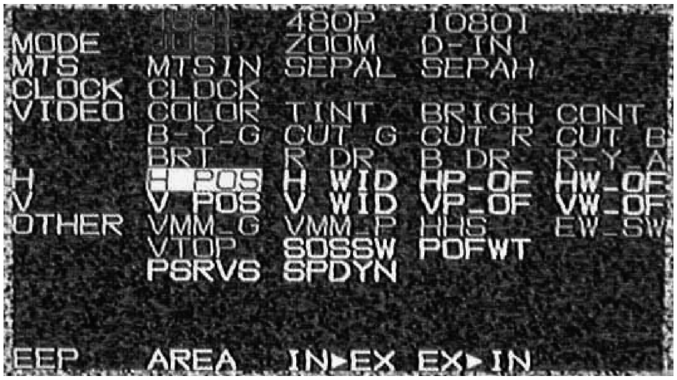
12 Hotel mode

1. Purpose

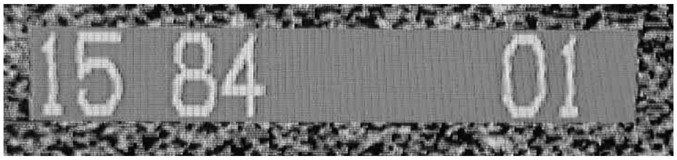
   Restrict a function for hotels.

2. Access command

   - Enter to the Service Mode.



   - Press MUTE button on remote control. Hold few seconds.
   - Set the data of EEPROM(ADDRESS 1584) to 01.



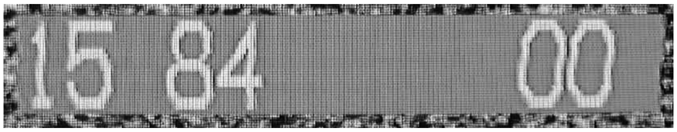
15 84 01

   Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.

   It can be made Hotel mode.

3. Exit command

   - First, set the data of EEPROM (ADDRESS 1584) to 00.



15 84 00

   Next, Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.

   Then, it is no longer hotel mode.

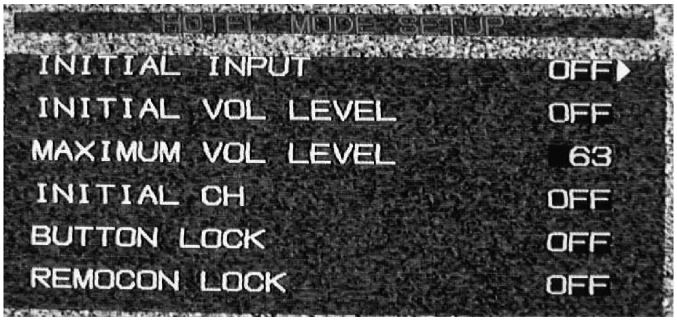
4. Access command to the Hotel mode setup menu

   - <Prerequisite> : It is conditions that the data of EEPROM(ADDRESS 1584) is 01.

   In order to display the Hotel mode setup menu, please enter the following command (within 2 second).

   [TV] : down + [REMOTE] : TV/VIDEO (3 times)

   Then, the Hotel mode setup menu is displayed.



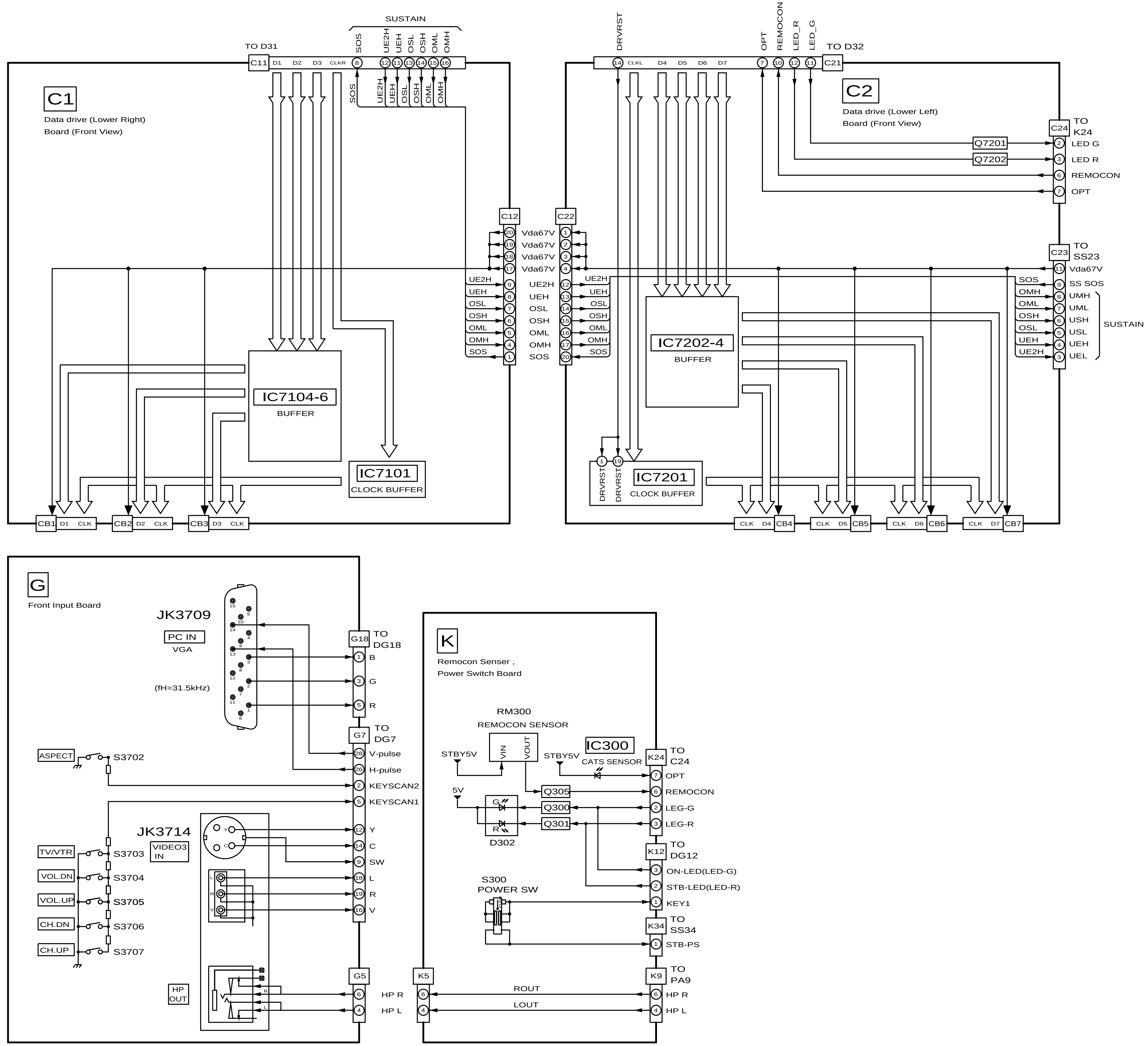
HOTEL MODE SETUP
INITIAL INPUT OFF▶
INITIAL VOL LEVEL OFF
MAXIMUM VOL LEVEL 63
INITIAL CH OFF
BUTTON LOCK OFF
REMOCON LOCK OFF

5. Explain the Hotel mode setup menu

CAUTION

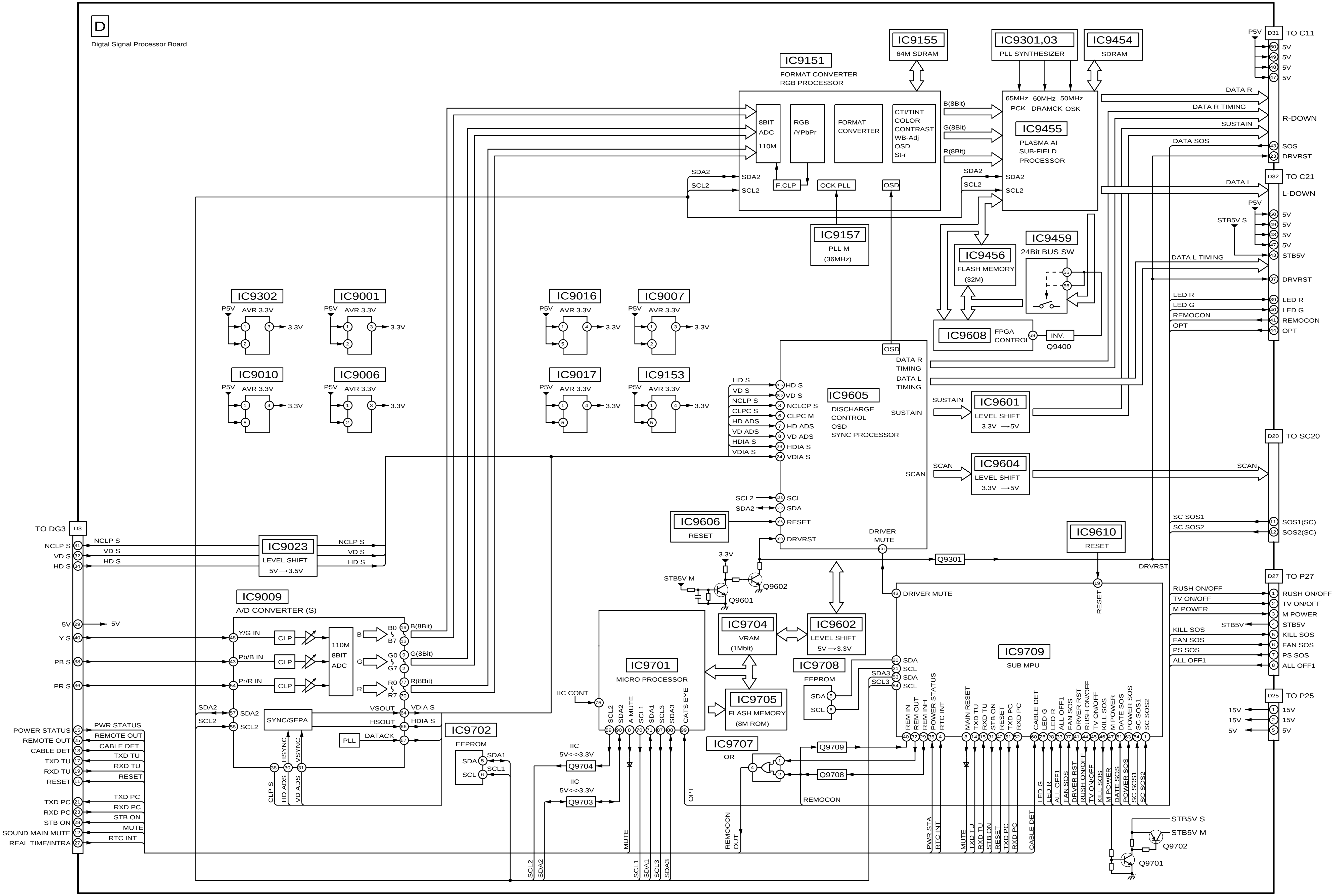
This setup is not valid, unless data of EEPROM (ADDRESS 1584) will be 01, even if each settings were done.

item	Function
INITIAL INPUT	Select input signal modes. Set this signal, each time power is switched on. <Selection> : Off/TV/COMP1/COMP2/DIGITAL/VIDEO1/VIDEO2/VIDEO3/PC/JPEG ・Off: give priority to a last memory. ・PC: selectable with VGA option
INITIAL VOL LEVEL	Adjust output Volume. Set this volume, each time power is switched on. If the value of InitVol is changed, volume will change. However, priority is given to a last memory when InitVol is Off. When "InitVol" is larger than "MaxVol", make "InitVol" and "MaxVol" the same. <Selection/Range> : Off/0 to 63 ・Off: give priority to a last memory
MAXIMUM VOL LEVEL	Adjust maximum volume. Set this max. volume, each time power is switched on. When "MaxVol" is smaller than "InitVol", make "MaxVol" and "InitVol" the same, if "InitVol" is not Off. <Range> : 0 to 63
INITIAL CH	Select program number. Set this program number, each time power is switched on. <Selection> : Off/0 to C125 ・Off: give priority to a last memory
BUTTON LOCK	Select local key conditions. Set this condition, each time power is switched on. <Selection> : Off/SETUPMENU/All ・Off: altogether valid ・Action: restrict ACTION-key selection ・All: altogether invalid.
REMOCON LOCK	Select remote control key conditions. Set this condition, each time power is switched on. <Selection> : Off/SETUP/MENU ・Off: altogether valid ・Action: menu is invalid


C1
Data drive (Lower Right) Board (Front View)
TO D31
C11
D1
D2
D3
CLKR
SUSTAIN
SOS
UE2H
UEH
OSL
OSH
OML
OMH
C12
Vda67V
UE2H
UEH
OSL
OSH
OML
OMH
SOS
IC7104-6
BUFFER
IC7101
CLOCK BUFFER
CB1
D1
CLK
CB2
D2
CLK
CB3
D3
CLK
C2
Data drive (Lower Left) Board (Front View)
DRVRST
CLKL
D4
D5
D6
D7
OPT
REMOCON
LED_R
LED_G
TO D32
C21
C22
C24
TO K24
Q7201
Q7202
LED G
LED R
REMOCON
OPT
C23
TO SS23
Vda67V
SS SOS
UMH
UML
USH
USL
UEH
UEL
SUSTAIN
IC7202-4
BUFFER
IC7201
CLOCK BUFFER
CB4
D4
CLK
CB5
D5
CB6
D6
CB7
D7
G
Front Input Board
JK3709
PC IN
VGA
(fH=31.5kHz)
G18
TO DG18
B
G
R
G7
TO DG7
V-pulse
H-pulse
KEYSCAN2
KEYSCAN1
ASPECT
S3702
JK3714
VIDEO3 IN
TV/VTR
S3703
VOL.DN
S3704
VOL.UP
S3705
CH.DN
S3706
CH.UP
S3707
Y
C
SW
L
R
V
HP OUT
G5
HP R
HP L
K
Remocon Senser , Power Switch Board
RM300
REMOCON SENSOR
VIN
VOUT
STBY5V
IC300
CATS SENSOR
STBY5V
5V
D302
Q305
Q300
Q301
K24
TO C24
OPT
REMOCON
LEG-G
LEG-R
K12
TO DG12
ON-LED(LED-G)
STB-LED(LED-R)
KEY1
S300
POWER SW
K34
TO SS34
STB-PS
K5
K9
TO PA9
ROUT
LOUT
HP R
HP L

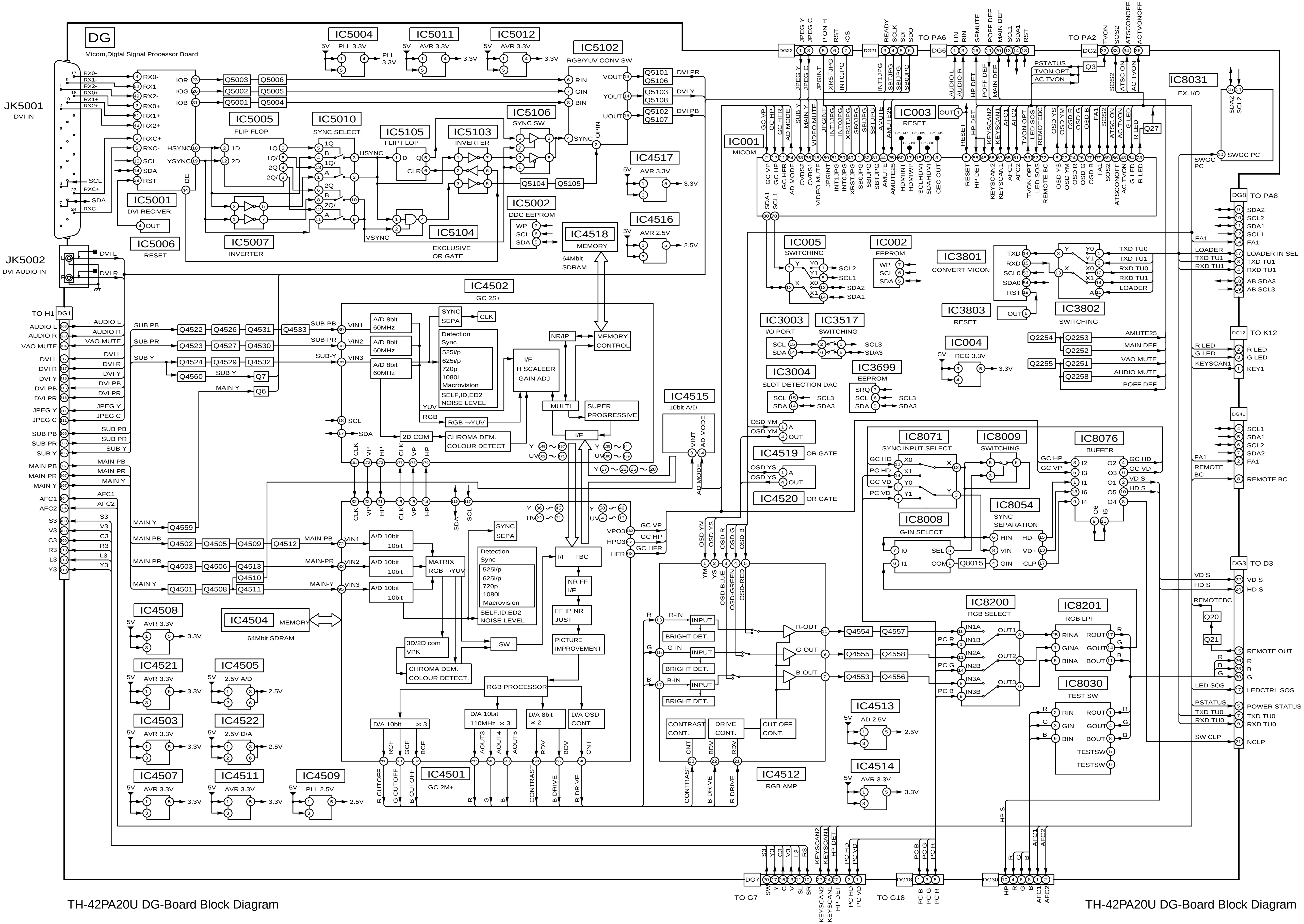
TH-42PA20U
C1,C2,G and K-Board Block Diagram

TH-42PA20U
C1,C2,G and K-Board Block Diagram


D
Digtal Signal Processor Board
IC9151
FORMAT CONVERTER
RGB PROCESSOR
8BIT ADC 110M
RGB /YPbPr
FORMAT CONVERTER
CTI/TINT COLOR CONTRAST WB-Adj OSD St-r
F.CLP
OCK PLL
OSD
SDA2
SCL2
IC9155
64M SDRAM
IC9301,03
PLL SYNTHESIZER
IC9454
SDRAM
65MHz 60MHz 50MHz
PCK DRAMCK OSK
IC9455
PLASMA AI SUB-FIELD PROCESSOR
B(8Bit)
G(8Bit)
R(8Bit)
IC9157
PLL M (36MHz)
IC9456
FLASH MEMORY (32M)
IC9459
24Bit BUS SW
IC9608
FPGA CONTROL
INV.
Q9400
P5V
D31
TO C11
5V
DATA R
DATA R TIMING
SUSTAIN
R-DOWN
DATA SOS
SOS
DRVRST
D32
TO C21
DATA L
L-DOWN
STB5V S
STB5V
DATA L TIMING
LED R
LED G
REMOCON
OPT
IC9302
IC9001
IC9016
IC9007
IC9010
IC9006
IC9017
IC9153
AVR 3.3V
3.3V
IC9605
DISCHARGE CONTROL OSD SYNC PROCESSOR
DATA R TIMING
DATA L TIMING
SUSTAIN
SCAN
HD S
VD S
NCLP S
CLPC S
CLPC M
HD ADS
VD ADS
HDIA S
VDIA S
SCL
SDA
RESET
DRVRST
DRIVER MUTE
IC9601
LEVEL SHIFT 3.3V → 5V
IC9604
LEVEL SHIFT 3.3V → 5V
D20
TO SC20
SC SOS1
SC SOS2
SOS1(SC)
SOS2(SC)
IC9606
RESET
IC9610
RESET
Q9301
3.3V
STB5V M
Q9601
Q9602
TO DG3
D3
NCLP S
VD S
HD S
IC9023
LEVEL SHIFT 5V → 3.5V
IC9009
A/D CONVERTER (S)
Y/G IN
Pb/B IN
Pr/R IN
CLP
110M 8BIT ADC
B0 B7
G0 G7
R0 R7
SYNC/SEPA
PLL
VSOUT
HSOUT
DATACK
VDIA S
HDIA S
HSYNC
VSYNC
CLP S
HD ADS
VD ADS
5V
Y S
PB S
PR S
POWER STATUS
REMOTE OUT
CABLE DET
TXD TU
RXD TU
RESET
TXD PC
RXD PC
STB ON
SOUND MAIN MUTE
REAL TIME/INTRA
PWR STATUS
MUTE
RTC INT
IC9702
EEPROM
SDA1
SCL1
IC9701
MICRO PROCESSOR
IIC CONT
A MUTE
SCL1
SDA1
SCL3
SDA3
CATS EYE
IIC 5V<->3.3V
Q9704
Q9703
IC9704
VRAM (1Mbit)
IC9602
LEVEL SHIFT 5V → 3.3V
IC9705
FLASH MEMORY (8M ROM)
IC9708
EEPROM
IC9707
OR
Q9709
Q9708
REMOCON
REMOCON OUT
OPT
IC9709
SUB MPU
DRIVER MUTE
REM IN
REM OUT
REM INH
POWER STATUS
RTC INT
MAIN RESET
TXD TU
RXD TU
STB ON
RESET
TXD PC
RXD PC
CABLE DET
LED G
LED R
ALL OFF1
FAN SOS
DRVER RST
RUSH ON/OFF
TV ON/OFF
KILL SOS
M POWER
DATE SOS
POWER SOS
SC SOS1
SC SOS2
PWR STA
D27
TO P27
RUSH ON/OFF
TV ON/OFF
M POWER
STB5V
KILL SOS
FAN SOS
PS SOS
ALL OFF1
D25
TO P25
15V
5V
STB5V S
STB5V M
Q9702
Q9701

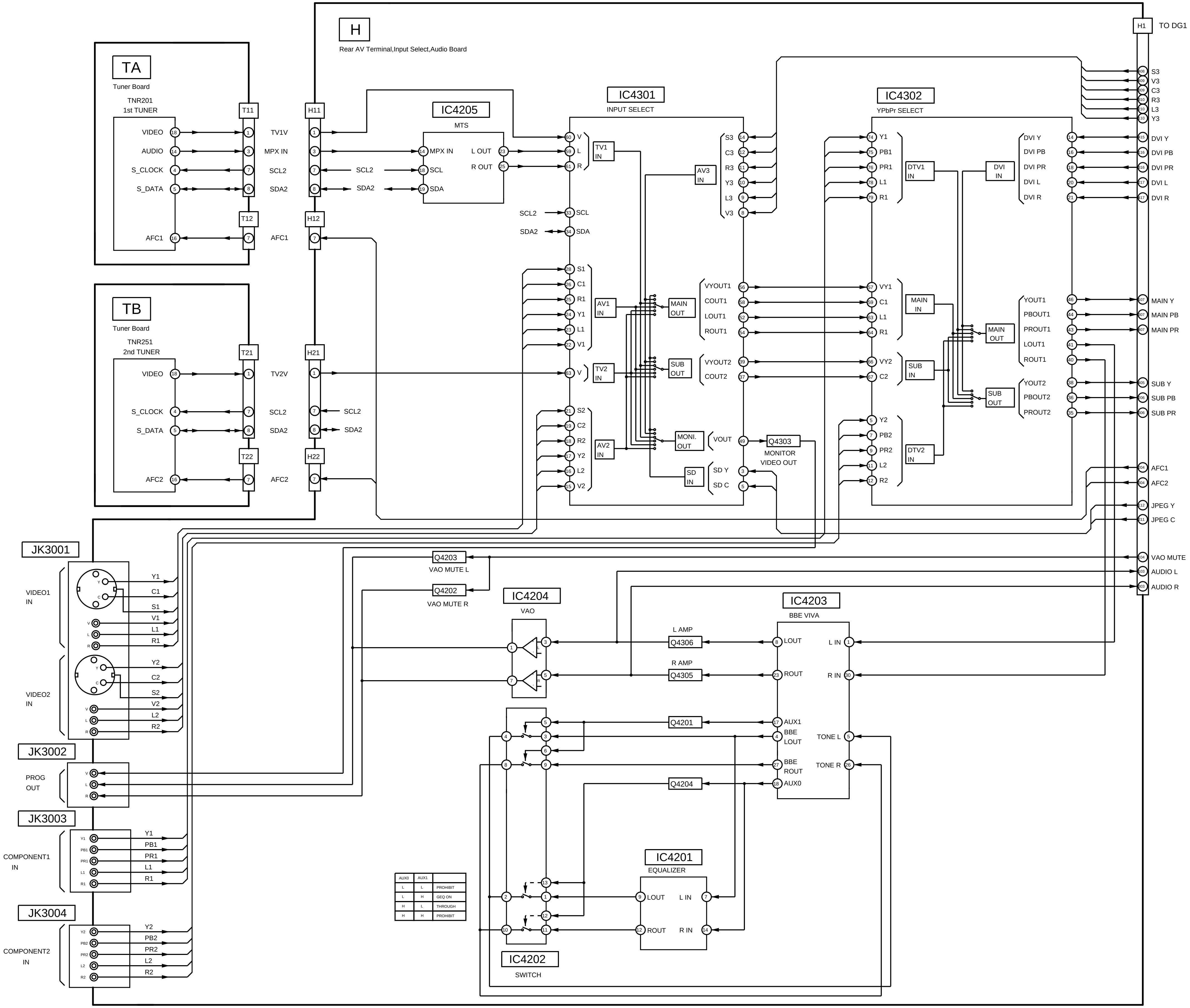
TH-42PA20U D-Board Block Diagram

TH-42PA20U D-Board Block Diagram


DG
Micom,Digtal Signal Processor Board
JK5001
DVI IN
JK5002
DVI AUDIO IN
IC5001
DVI RECIVER
IC5006
RESET
IC5005
FLIP FLOP
IC5010
SYNC SELECT
IC5007
INVERTER
IC5105
FLIP FLOP
IC5103
INVERTER
IC5104
EXCLUSIVE OR GATE
IC5106
SYNC SW
IC5002
DDC EEPROM
IC5004
PLL 3.3V
IC5011
AVR 3.3V
IC5012
AVR 3.3V
IC5102
RGB/YUV CONV.SW
IC4518
MEMORY
64Mbit SDRAM
IC4517
AVR 3.3V
IC4516
AVR 2.5V
IC4502
GC 2S+
A/D 8bit 60MHz
SYNC SEPA
CLK
Detection Sync
525i/p
625i/p
720p
1080i
Macrovision
SELF,ID,ED2
NOISE LEVEL
I/F H SCALEER GAIN ADJ
NR/IP
MEMORY CONTROL
MULTI
SUPER PROGRESSIVE
RGB →YUV
2D COM
CHROMA DEM. COLOUR DETECT
IC4515
10bit A/D
IC4501
GC 2M+
A/D 10bit
MATRIX RGB →YUV
3D/2D com VPK
CHROMA DEM. COLOUR DETECT.
SW
I/F TBC
NR FF I/F
FF IP NR JUST
PICTURE IMPROVEMENT
RGB PROCESSOR
D/A 10bit × 3
D/A 10bit 110MHz × 3
D/A 8bit × 2
D/A OSD CONT
IC4504
MEMORY
64Mbit SDRAM
IC4508
AVR 3.3V
IC4521
AVR 3.3V
IC4505
2.5V A/D
IC4503
AVR 3.3V
IC4522
2.5V D/A
IC4507
AVR 3.3V
IC4511
AVR 3.3V
IC4509
PLL 2.5V
IC4512
RGB AMP
CONTRAST CONT.
DRIVE CONT.
CUT OFF CONT.
BRIGHT DET.
INPUT
R-OUT
G-OUT
B-OUT
IC001
MICOM
IC003
RESET
IC005
SWITCHING
IC002
EEPROM
IC3801
CONVERT MICON
IC3803
RESET
IC3802
SWITCHING
IC3003
I/O PORT
IC3517
SWITCHING
IC3004
SLOT DETECTION DAC
IC3699
EEPROM
IC004
REG 3.3V
IC4519
OR GATE
IC4520
OR GATE
IC8071
SYNC INPUT SELECT
IC8009
SWITCHING
IC8076
BUFFER
IC8054
SYNC SEPARATION
IC8008
G-IN SELECT
IC8200
RGB SELECT
IC8201
RGB LPF
IC8030
TEST SW
IC8031
EX. I/O
IC4513
AD 2.5V
IC4514
AVR 3.3V
TO H1
TO PA6
TO PA2
TO PA8
TO K12
TO D3
TO G7
TO G18
DG1
DG22
DG21
DG6
DG2
DG8
DG12
DG41
DG3
DG7
DG18
DG30
AUDIO L
AUDIO R
VAO MUTE
DVI L
DVI R
DVI Y
DVI PB
DVI PR
JPEG Y
JPEG C
SUB PB
SUB PR
SUB Y
MAIN PB
MAIN PR
MAIN Y
AFC1
AFC2
S3
V3
C3
R3
L3
Y3
SDA2
SCL2
SDA1
SCL1
FA1
LOADER IN SEL
TXD TU1
RXD TU1
AB SDA3
AB SCL3
R LED
G LED
KEY1
REMOTE BC
VD S
HD S
REMOTE OUT
LEDCTRL SOS
POWER STATUS
TXD TU0
RXD TU0
NCLP

TH-42PA20U DG-Board Block Diagram

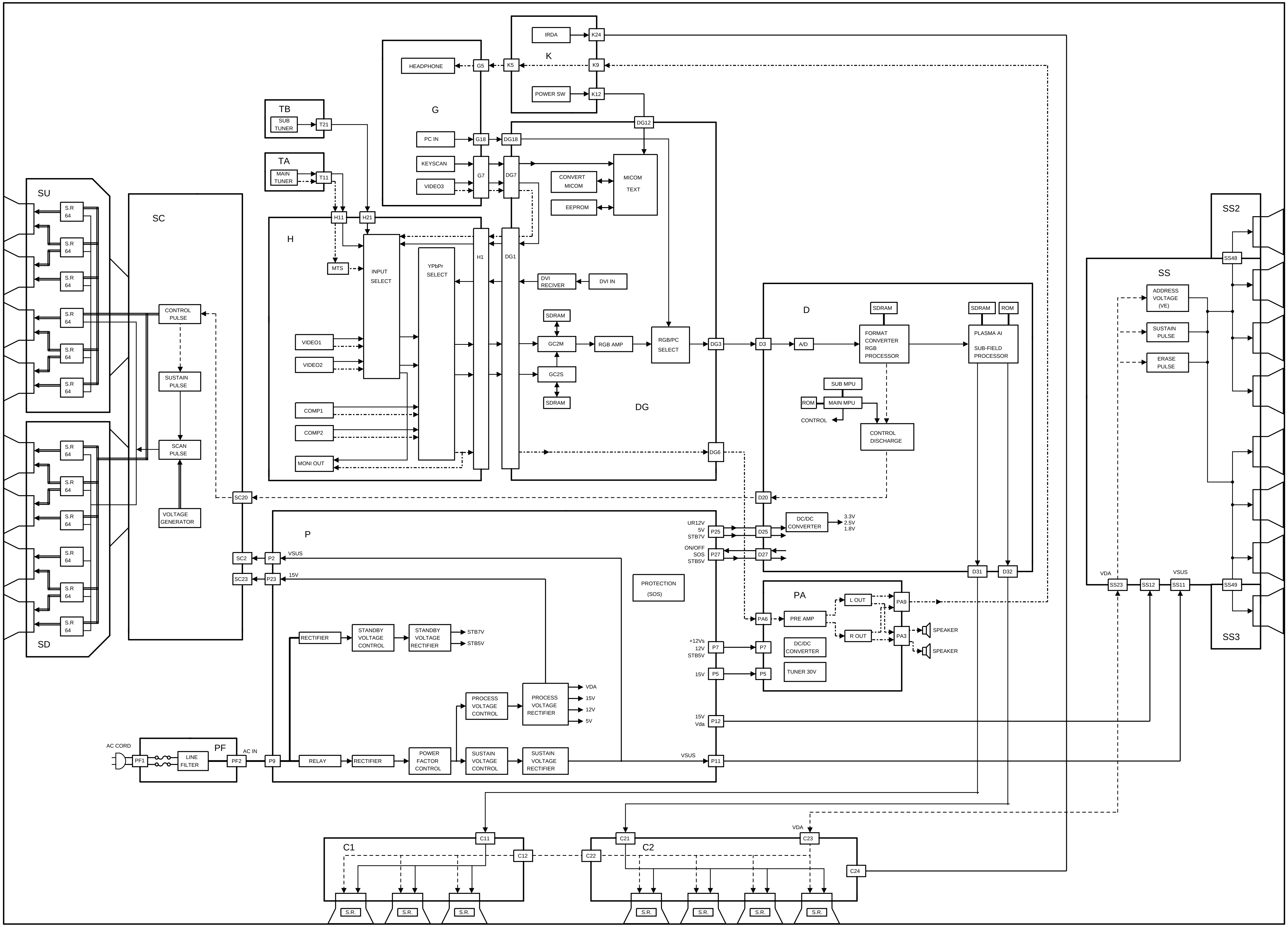
TH-42PA20U DG-Board Block Diagram


H
Rear AV Terminal,Input Select,Audio Board
TA
Tuner Board
TNR201
1st TUNER
VIDEO
AUDIO
S_CLOCK
S_DATA
AFC1
T11
T12
TV1V
MPX IN
SCL2
SDA2
AFC1
H11
H12
TB
Tuner Board
TNR251
2nd TUNER
VIDEO
S_CLOCK
S_DATA
AFC2
T21
T22
TV2V
SCL2
SDA2
AFC2
H21
H22
IC4205
MTS
MPX IN
SCL
SDA
L OUT
R OUT
IC4301
INPUT SELECT
V
L
R
SCL
SDA
S1
C1
R1
Y1
L1
V1
S2
C2
R2
Y2
L2
V2
TV1 IN
AV1 IN
TV2 IN
AV2 IN
AV3 IN
MAIN OUT
SUB OUT
MONI. OUT
SD IN
S3
C3
R3
Y3
L3
V3
VYOUT1
COUT1
LOUT1
ROUT1
VYOUT2
COUT2
VOUT
SD Y
SD C
Q4303
MONITOR VIDEO OUT
IC4302
YPbPr SELECT
Y1
PB1
PR1
L1
R1
DTV1 IN
DVI IN
DVI Y
DVI PB
DVI PR
DVI L
DVI R
VY1
C1
L1
R1
MAIN IN
VY2
C2
SUB IN
Y2
PB2
PR2
L2
R2
DTV2 IN
MAIN OUT
SUB OUT
YOUT1
PBOUT1
PROUT1
LOUT1
ROUT1
YOUT2
PBOUT2
PROUT2
H1
TO DG1
S3
V3
C3
R3
L3
Y3
DVI Y
DVI PB
DVI PR
DVI L
DVI R
MAIN Y
MAIN PB
MAIN PR
SUB Y
SUB PB
SUB PR
AFC1
AFC2
JPEG Y
JPEG C
VAO MUTE
AUDIO L
AUDIO R
JK3001
VIDEO1 IN
VIDEO2 IN
Y1
C1
S1
V1
L1
R1
Y2
C2
S2
V2
L2
R2
JK3002
PROG OUT
JK3003
COMPONENT1 IN
Y1
PB1
PR1
L1
R1
JK3004
COMPONENT2 IN
Y2
PB2
PR2
L2
R2
Q4203
VAO MUTE L
Q4202
VAO MUTE R
IC4204
VAO
IC4203
BBE VIVA
L AMP
Q4306
R AMP
Q4305
LOUT
ROUT
L IN
R IN
AUX1
BBE LOUT
BBE ROUT
AUX0
TONE L
TONE R
Q4201
Q4204
IC4201
EQUALIZER
LOUT
ROUT
L IN
R IN
IC4202
SWITCH

AUX0	AUX1	
L	L	PROHIBIT
L	H	GEQ ON
H	L	THROUGH
H	H	PROHIBIT

TH-42PA20U H,TA and TB-Board Block Diagram

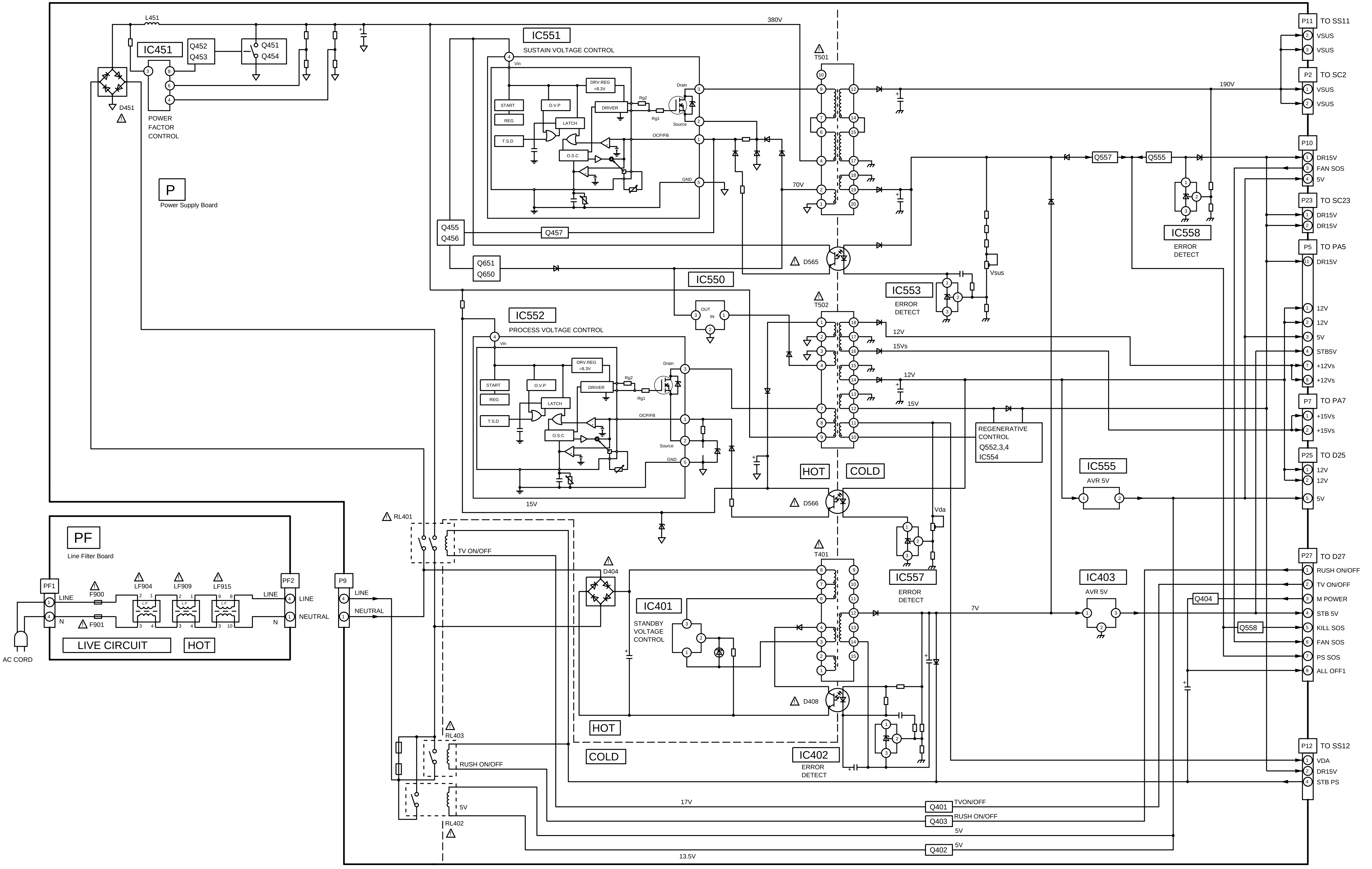
TH-42PA20U H,TA and TB-Board Block Diagram



K
IRDA
K24
K5
K9
POWER SW
K12
G
HEADPHONE
G5
PC IN
G18
KEYSCAN
VIDEO3
G7
TB
SUB TUNER
T21
TA
MAIN TUNER
T11
DG12
DG18
DG7
CONVERT MICOM
EEPROM
MICOM TEXT
H11
H21
H
MTS
INPUT SELECT
YPbPr SELECT
H1
DG1
DVI RECIVER
DVI IN
VIDEO1
VIDEO2
COMP1
COMP2
MONI OUT
SDRAM
GC2M
RGB AMP
RGB/PC SELECT
DG3
GC2S
SDRAM
DG
DG6
SU
S.R 64
SD
SC
CONTROL PULSE
SUSTAIN PULSE
SCAN PULSE
VOLTAGE GENERATOR
SC20
SC2
SC23
D
D3
A/D
SDRAM
FORMAT CONVERTER RGB PROCESSOR
SDRAM
ROM
PLASMA AI SUB-FIELD PROCESSOR
SUB MPU
ROM
MAIN MPU
CONTROL
CONTROL DISCHARGE
D20
DC/DC CONVERTER
3.3V
2.5V
1.8V
D25
D27
D31
D32
P
UR12V
5V
STB7V
P25
ON/OFF
SOS
STB5V
P27
P2
VSUS
P23
15V
PROTECTION (SOS)
RECTIFIER
STANDBY VOLTAGE CONTROL
STANDBY VOLTAGE RECTIFIER
STB7V
STB5V
PROCESS VOLTAGE CONTROL
PROCESS VOLTAGE RECTIFIER
VDA
15V
12V
5V
AC CORD
PF1
LINE FILTER
PF
PF2
AC IN
P9
RELAY
RECTIFIER
POWER FACTOR CONTROL
SUSTAIN VOLTAGE CONTROL
SUSTAIN VOLTAGE RECTIFIER
VSUS
P11
+12Vs
12V
STB5V
P7
15V
P5
15V
Vda
P12
PA
PA6
PRE AMP
L OUT
R OUT
PA9
PA3
SPEAKER
SPEAKER
DC/DC CONVERTER
TUNER 30V
P7
P5
SS2
SS48
SS
ADDRESS VOLTAGE (VE)
SUSTAIN PULSE
ERASE PULSE
VDA
SS23
SS12
VSUS
SS11
SS49
SS3
C1
C11
C12
C22
C21
C2
VDA
C23
C24
S.R.

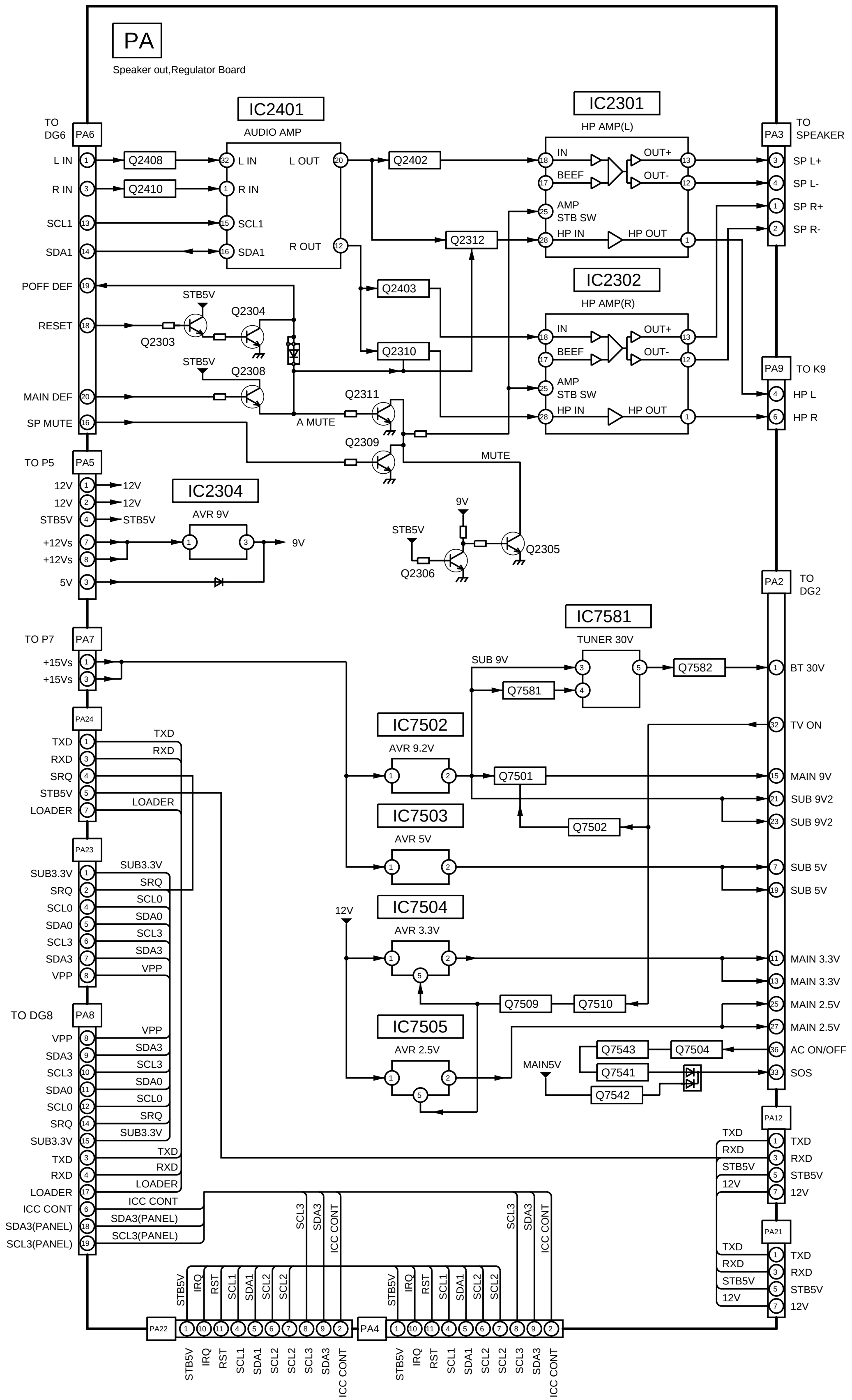
TH-42PA20U
Main Block Diagram

TH-42PA20U
Main Block Diagram


L451
IC451
Q452
Q453
Q451
Q454
D451
POWER
FACTOR
CONTROL
P
Power Supply Board
380V
IC551
SUSTAIN VOLTAGE CONTROL
Vin
START
REG
T.S.D
O.V.P
LATCH
O.S.C
DRV.REG
=8.3V
DRIVER
Rg2
Rg1
Drain
Source
OCP/FB
GND
T501
190V
70V
Q455
Q456
Q457
Q651
Q650
D565
IC550
OUT
IN
IC553
ERROR
DETECT
Vsus
IC552
PROCESS VOLTAGE CONTROL
T502
12V
15Vs
12V
15V
REGENERATIVE
CONTROL
Q552,3,4
IC554
15V
HOT
COLD
D566
Vda
IC557
ERROR
DETECT
IC555
AVR 5V
Q557
Q555
IC558
ERROR
DETECT
RL401
TV ON/OFF
D404
T401
IC401
STANDBY
VOLTAGE
CONTROL
7V
IC403
AVR 5V
Q404
Q558
D408
HOT
COLD
IC402
ERROR
DETECT
RL403
RUSH ON/OFF
5V
RL402
17V
Q401
TVON/OFF
Q403
RUSH ON/OFF
5V
Q402
5V
13.5V
PF
Line Filter Board
PF1
LINE
N
F900
F901
LF904
LF909
LF915
PF2
LINE
N
LINE
NEUTRAL
P9
LINE
NEUTRAL
LIVE CIRCUIT
HOT
AC CORD
P11
TO SS11
VSUS
VSUS
P2
TO SC2
VSUS
VSUS
P10
DR15V
FAN SOS
5V
P23
TO SC23
DR15V
DR15V
P5
TO PA5
DR15V
12V
12V
5V
STB5V
+12Vs
+12Vs
P7
TO PA7
+15Vs
+15Vs
P25
TO D25
12V
12V
5V
P27
TO D27
RUSH ON/OFF
TV ON/OFF
M POWER
STB 5V
KILL SOS
FAN SOS
PS SOS
ALL OFF1
P12
TO SS12
VDA
DR15V
STB PS

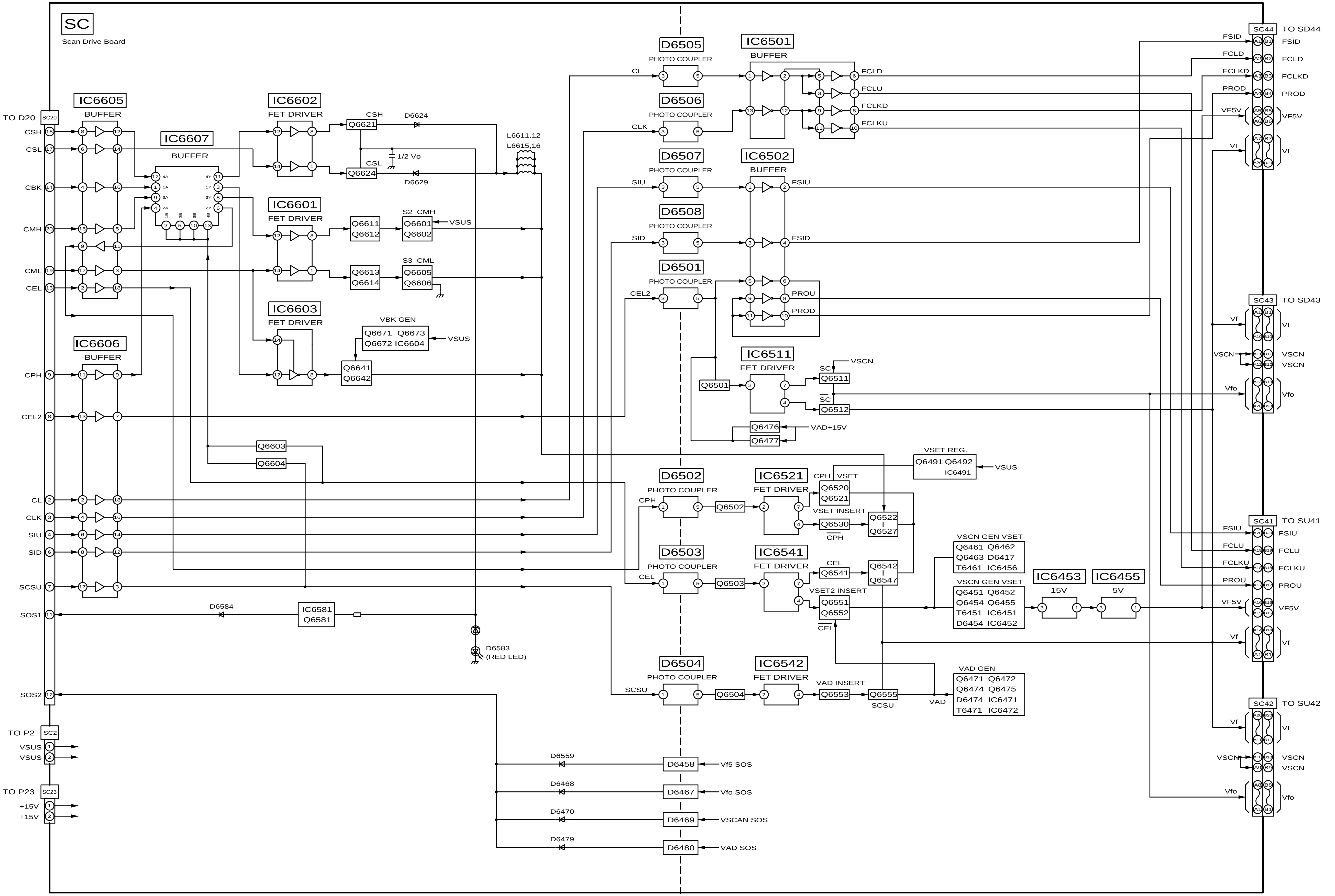
TH-42PA20U
PF and P-Board Block Diagram

TH-42PA20U
PF and P-Board Block Diagram


PA
Speaker out,Regulator Board
TO DG6
PA6
L IN
R IN
SCL1
SDA1
POFF DEF
RESET
MAIN DEF
SP MUTE
IC2401
AUDIO AMP
Q2408
Q2410
L IN
R IN
SCL1
SDA1
L OUT
R OUT
Q2402
Q2403
Q2310
Q2312
STB5V
Q2303
Q2304
Q2308
Q2311
Q2309
A MUTE
MUTE
IC2301
HP AMP(L)
IN
BEEF
AMP
STB SW
HP IN
HP OUT
OUT+
OUT-
IC2302
HP AMP(R)
PA3
TO SPEAKER
SP L+
SP L-
SP R+
SP R-
PA9
TO K9
HP L
HP R
TO P5
PA5
12V
12V
STB5V
+12Vs
+12Vs
5V
IC2304
AVR 9V
9V
Q2306
Q2305
TO DG2
PA2
IC7581
TUNER 30V
SUB 9V
Q7581
Q7582
BT 30V
TV ON
TO P7
PA7
+15Vs
+15Vs
IC7502
AVR 9.2V
Q7501
Q7502
MAIN 9V
SUB 9V2
SUB 9V2
IC7503
AVR 5V
SUB 5V
SUB 5V
IC7504
AVR 3.3V
12V
MAIN 3.3V
MAIN 3.3V
Q7509
Q7510
MAIN 2.5V
MAIN 2.5V
IC7505
AVR 2.5V
MAIN5V
Q7543
Q7504
Q7541
Q7542
AC ON/OFF
SOS
PA24
TXD
RXD
SRQ
STB5V
LOADER
PA23
SUB3.3V
SRQ
SCL0
SDA0
SCL3
SDA3
VPP
TO DG8
PA8
VPP
SDA3
SCL3
SDA0
SCL0
SRQ
SUB3.3V
TXD
RXD
LOADER
ICC CONT
SDA3(PANEL)
SCL3(PANEL)
PA12
TXD
RXD
STB5V
12V
PA21
TXD
RXD
STB5V
12V
PA22
PA4
STB5V
IRQ
RST
SCL1
SDA1
SCL2
SCL2
SCL3
SDA3
ICC CONT

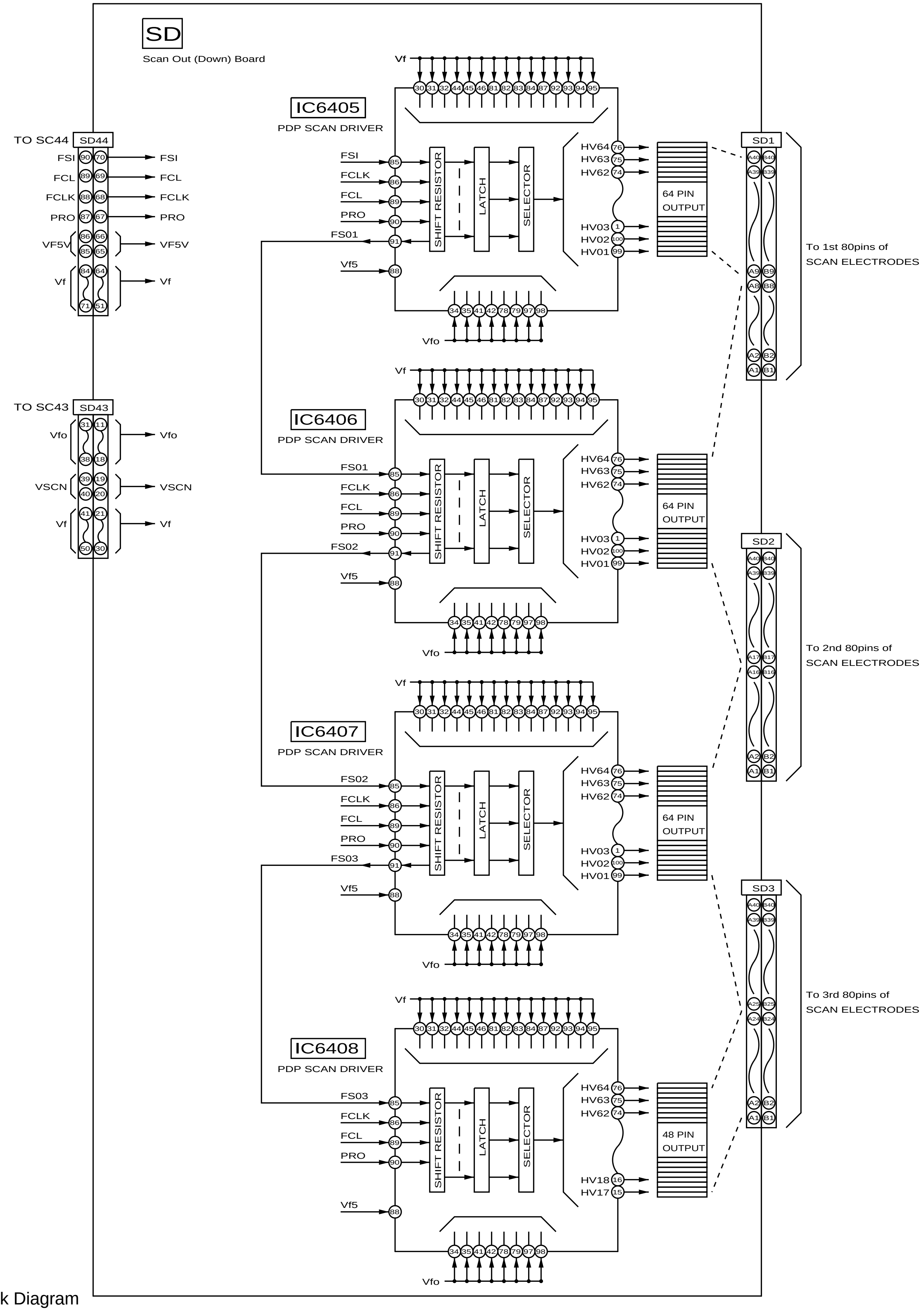
TH-42PA20U
PA-Board Block Diagram

TH-42PA20U
PA-Board Block Diagram


SC
Scan Drive Board
TO D20
SC20
CSH
CSL
CBK
CMH
CML
CEL
CPH
CEL2
CL
CLK
SIU
SID
SCSU
SOS1
SOS2
TO P2
SC2
VSUS
VSUS
TO P23
SC23
+15V
+15V
IC6605
BUFFER
IC6606
BUFFER
IC6607
BUFFER
4A
1A
3A
2A
1B
2B
3B
4B
4Y
1Y
3Y
2Y
IC6602
FET DRIVER
IC6601
FET DRIVER
IC6603
FET DRIVER
CSH
Q6621
D6624
CSL
Q6624
D6629
1/2 Vo
L6611,12
L6615,16
Q6611
Q6612
S2 CMH
Q6601
Q6602
VSUS
Q6613
Q6614
S3 CML
Q6605
Q6606
VBK GEN
Q6671 Q6673
Q6672 IC6604
VSUS
Q6641
Q6642
Q6603
Q6604
D6584
IC6581
Q6581
D6583
(RED LED)
D6505
PHOTO COUPLER
CL
D6506
PHOTO COUPLER
CLK
D6507
PHOTO COUPLER
SIU
D6508
PHOTO COUPLER
SID
D6501
PHOTO COUPLER
CEL2
IC6501
BUFFER
FCLD
FCLU
FCLKD
FCLKU
IC6502
BUFFER
FSIU
FSID
PROU
PROD
IC6511
FET DRIVER
VSCN
Q6501
SC
Q6511
SC
Q6512
Q6476
Q6477
VAD+15V
VSET REG.
Q6491 Q6492
IC6491
VSUS
D6502
PHOTO COUPLER
CPH
Q6502
IC6521
FET DRIVER
CPH VSET
Q6520
Q6521
VSET INSERT
Q6530
CPH
Q6522
Q6527
D6503
PHOTO COUPLER
CEL
Q6503
IC6541
FET DRIVER
CEL
Q6541
Q6542
Q6547
VSET2 INSERT
Q6551
Q6552
CEL
VSCN GEN VSET
Q6461 Q6462
Q6463 D6417
T6461 IC6456
VSCN GEN VSET
Q6451 Q6452
Q6454 Q6455
T6451 IC6451
D6454 IC6452
IC6453
15V
IC6455
5V
D6504
PHOTO COUPLER
SCSU
Q6504
IC6542
FET DRIVER
VAD INSERT
Q6553
Q6555
SCSU
VAD
VAD GEN
Q6471 Q6472
Q6474 Q6475
D6474 IC6471
T6471 IC6472
D6559
D6458
Vf5 SOS
D6468
D6467
Vfo SOS
D6470
D6469
VSCAN SOS
D6479
D6480
VAD SOS
SC44
TO SD44
FSID
FCLD
FCLKD
PROD
VF5V
Vf
SC43
TO SD43
Vf
VSCN
VSCN
Vfo
SC41
TO SU41
FSIU
FCLU
FCLKU
PROU
VF5V
Vf
SC42
TO SU42
Vf
VSCN
VSCN
Vfo

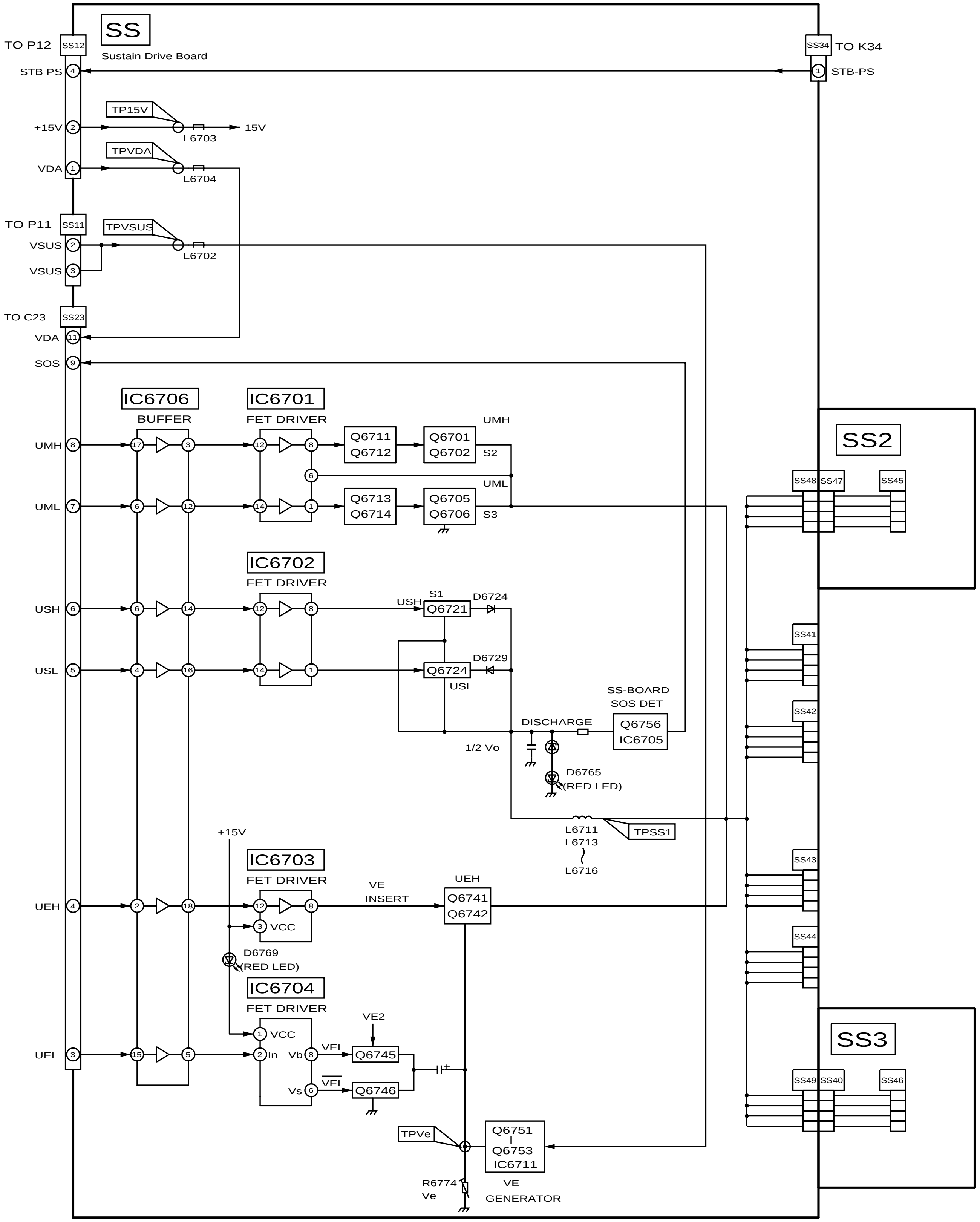
TH-42PA20U
SC-Board Block Diagram

TH-42PA20U
SC-Board Block Diagram


SD
Scan Out (Down) Board
TO SC44
SD44
FSI
FCL
FCLK
PRO
VF5V
Vf
TO SC43
SD43
Vfo
VSCN
Vf
IC6405
PDP SCAN DRIVER
IC6406
PDP SCAN DRIVER
IC6407
PDP SCAN DRIVER
IC6408
PDP SCAN DRIVER
SHIFT RESISTOR
LATCH
SELECTOR
FS01
FS02
FS03
Vf5
Vfo
HV64
HV63
HV62
HV03
HV02
HV01
HV18
HV17
64 PIN OUTPUT
48 PIN OUTPUT
SD1
SD2
SD3
To 1st 80pins of SCAN ELECTRODES
To 2nd 80pins of SCAN ELECTRODES
To 3rd 80pins of SCAN ELECTRODES

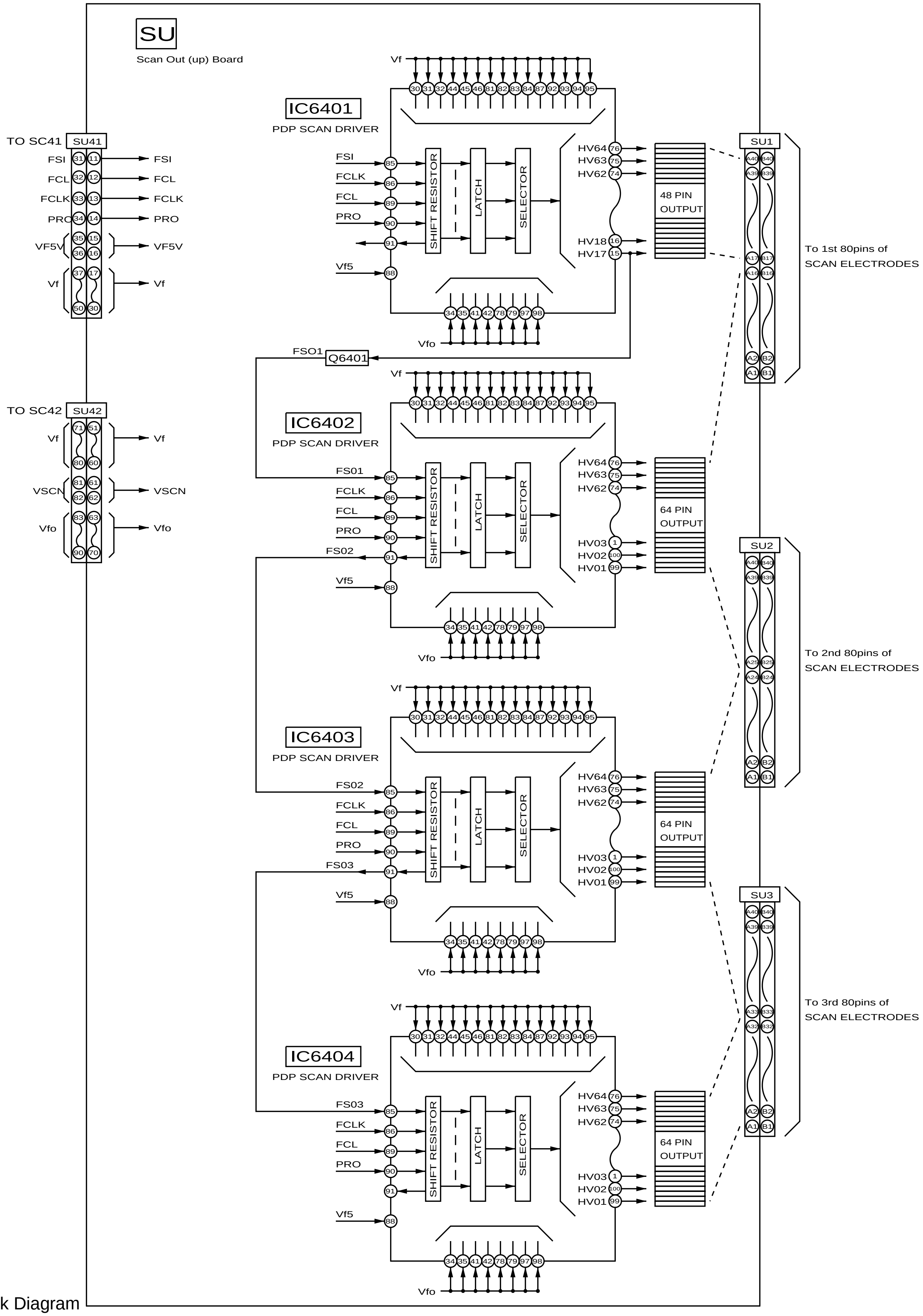
TH-42PA20U
SD-Board Block Diagram

TH-42PA20U
SD-Board Block Diagram


SS
Sustain Drive Board
TO P12
SS12
STB PS
+15V
VDA
TP15V
L6703
15V
TPVDA
L6704
TO P11
SS11
VSUS
VSUS
TPVSUS
L6702
TO C23
SS23
VDA
SOS
TO K34
SS34
STB-PS
IC6706
BUFFER
IC6701
FET DRIVER
UMH
UML
Q6711
Q6712
Q6701
Q6702
S2
Q6713
Q6714
Q6705
Q6706
S3
IC6702
FET DRIVER
USH
USL
S1
Q6721
D6724
Q6724
D6729
DISCHARGE
1/2 Vo
SS-BOARD
SOS DET
Q6756
IC6705
D6765
(RED LED)
L6711
L6713
L6716
TPSS1
+15V
IC6703
FET DRIVER
VCC
UEH
VE
INSERT
Q6741
Q6742
D6769
(RED LED)
IC6704
FET DRIVER
VCC
In
Vb
Vs
VE2
VEL
Q6745
VEL
Q6746
UEL
TPVe
Q6751
Q6753
IC6711
VE
GENERATOR
R6774
Ve
SS2
SS48
SS47
SS45
SS41
SS42
SS43
SS44
SS3
SS49
SS40
SS46

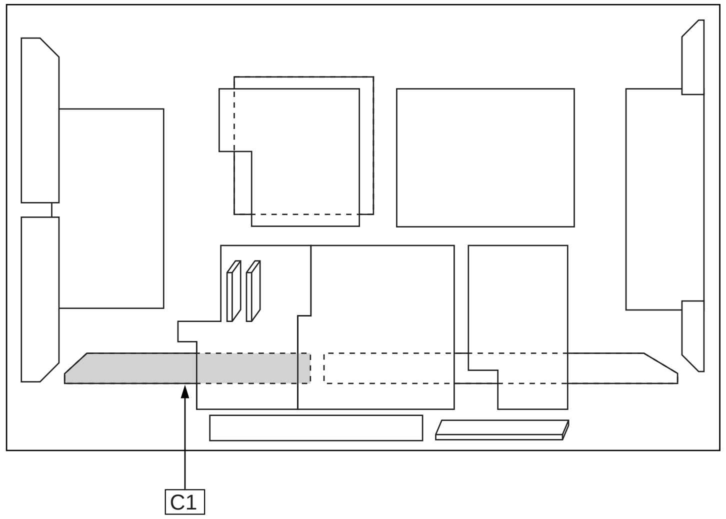
TH-42PA20U
SS,SS2 and SS3-Board Block Diagram

TH-42PA20U
SS,SS2 and SS3-Board Block Diagram

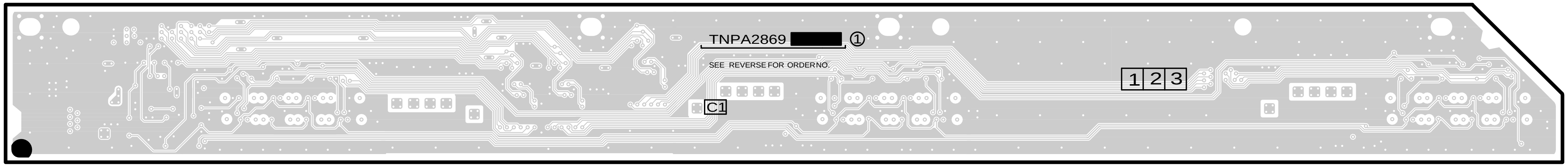

SU
Scan Out (up) Board
TO SC41
SU41
FSI
FCL
FCLK
PRO
VF5V
Vf
TO SC42
SU42
Vf
VSCN
Vfo
IC6401
PDP SCAN DRIVER
IC6402
PDP SCAN DRIVER
IC6403
PDP SCAN DRIVER
IC6404
PDP SCAN DRIVER
SHIFT RESISTOR
LATCH
SELECTOR
Vf
Vf5
Vfo
FS01
FS02
FS03
Q6401
HV64
HV63
HV62
HV18
HV17
HV03
HV02
HV01
48 PIN OUTPUT
64 PIN OUTPUT
SU1
SU2
SU3
To 1st 80pins of SCAN ELECTRODES
To 2nd 80pins of SCAN ELECTRODES
To 3rd 80pins of SCAN ELECTRODES

TH-42PA20U
SU-Board Block Diagram

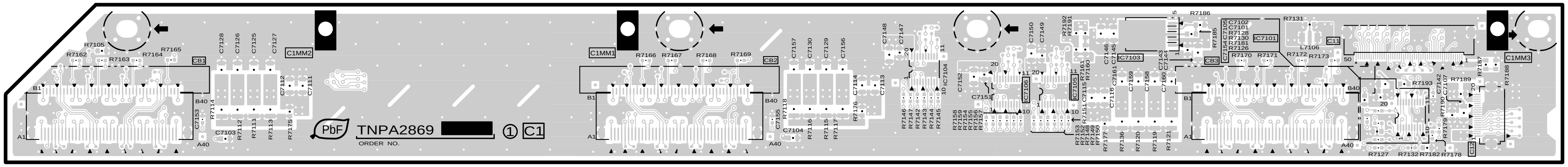
TH-42PA20U
SU-Board Block Diagram



C1-BOARD(FOIL SIDE)
TNPA2869


TNPA2869 ①
SEE REVERSE FOR ORDER NO.
C1
1 2 3

C1-BOARD(COMPONENT SIDE)
TNPA2869


R7105
R7162
R7163
R7164
R7165
CB1
C7128
C7126
C7125
C7127
C1MM2
C7112
C7111
B1
A1
B40
A40
C7153
R7114
C7103
R7112
R7111
R7113
R7175
PbF
TNPA2869
ORDER NO.
① C1
C1MM1
R7166
R7167
R7168
R7169
CB2
C7157
C7130
C7129
C7156
C7104
R7118
R7116
R7115
R7117
R7176
C7114
C7113
C7148
C7147
C7152
C7151
C7150
C7149
R7192
R7191
C7106
C7105
C7103
CB3
R7186
C7102
C7101
R7131
L7106
C11
R7170
R7171
R7172
R7173
R7193
R7189
R7188
C1MM3
R7127
R7132
R7182
R7178

6

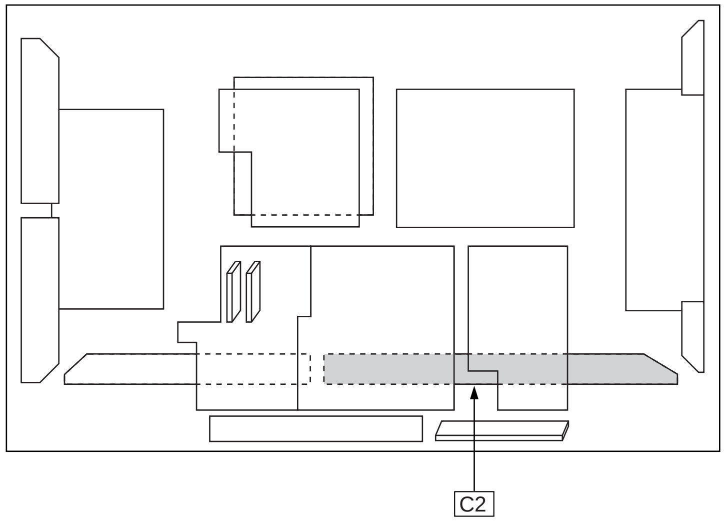
5

4

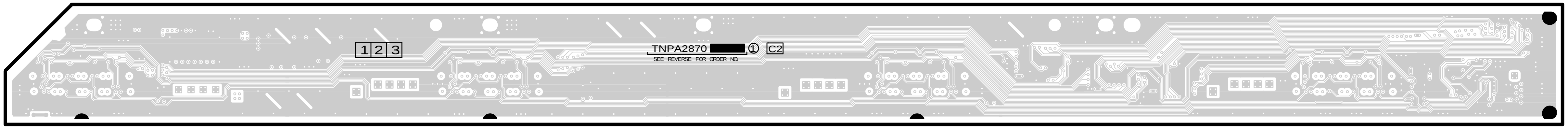
3

2

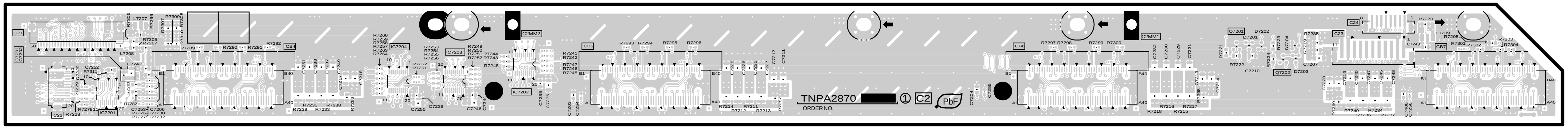
1



C2-BOARD(FOIL SIDE)
TNPA2870

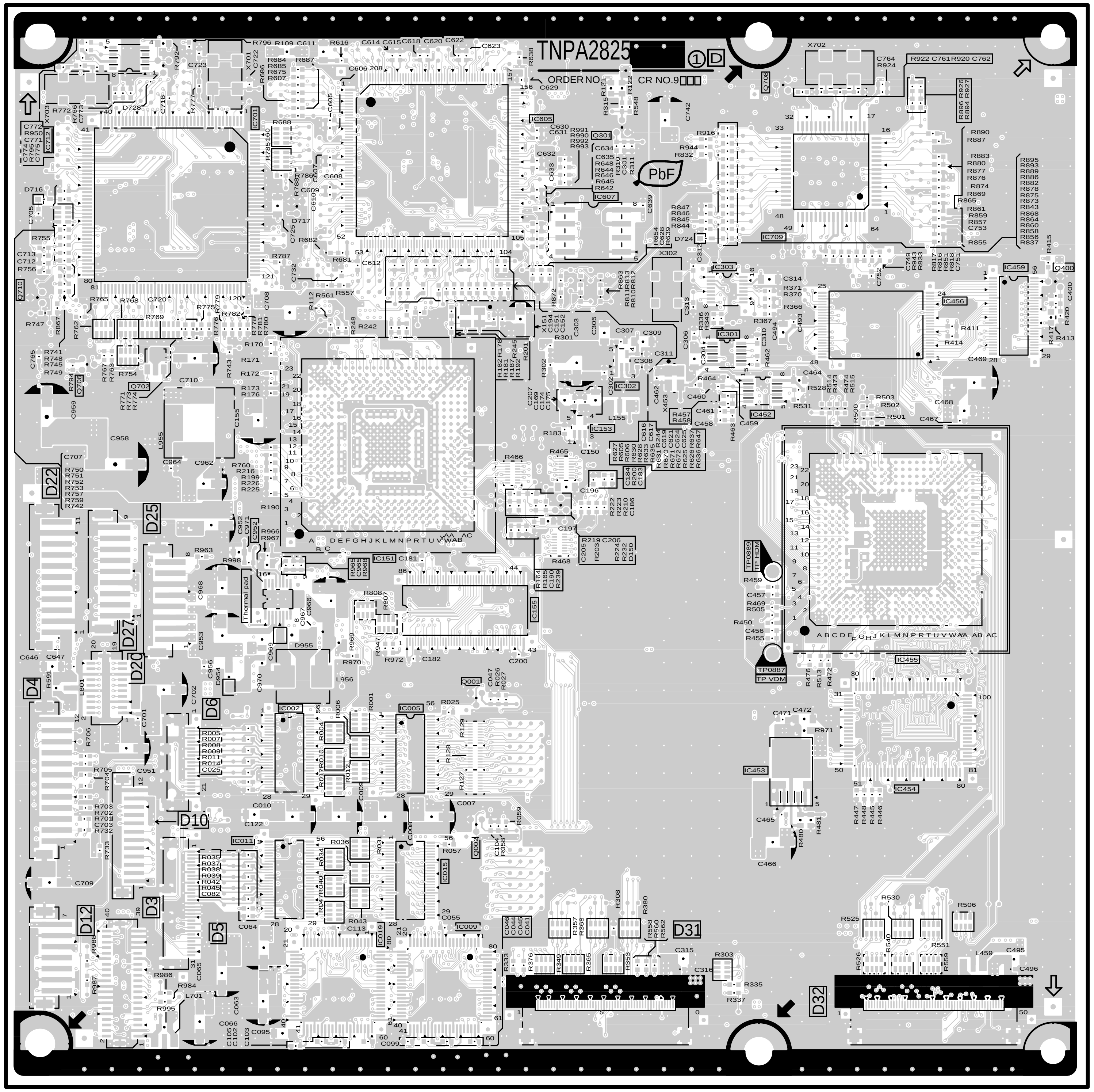

1 2 3
TNPA2870 ① C2
SEE REVERSE FOR ORDER NO.

C2-BOARD(COMPONENT SIDE)
TNPA2870

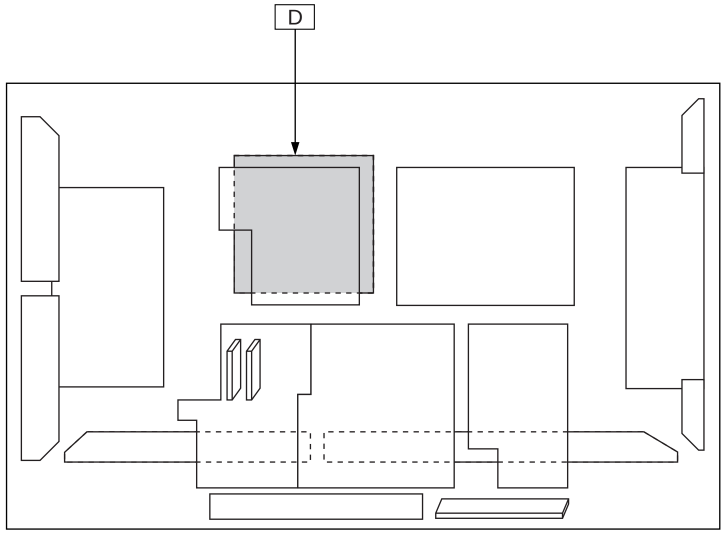

C2MM2
C2MM1
IC7201
IC7202
IC7203
IC7204
TNPA2870 ① C2
ORDER NO.
PbF

A B C D E F G H I

D-BOARD(COMPONENT SIDE)
TXN/D10QCS


TNPA2825
①D
ORDER NO
CR NO.9
PbF
IC605
IC607
IC709
IC303
IC301
IC302
IC452
IC153
IC151
IC155
IC002
IC005
IC011
IC015
IC009
IC453
IC454
IC455
IC456
IC459
Q301
Q702
Q706
Q708
Q710
D22
D25
D27
D20
D4
D6
D10
D12
D3
D5
D31
D32
TP0889
TP HDM
TP0887
TP VDM
Thermal pad
X702
X701

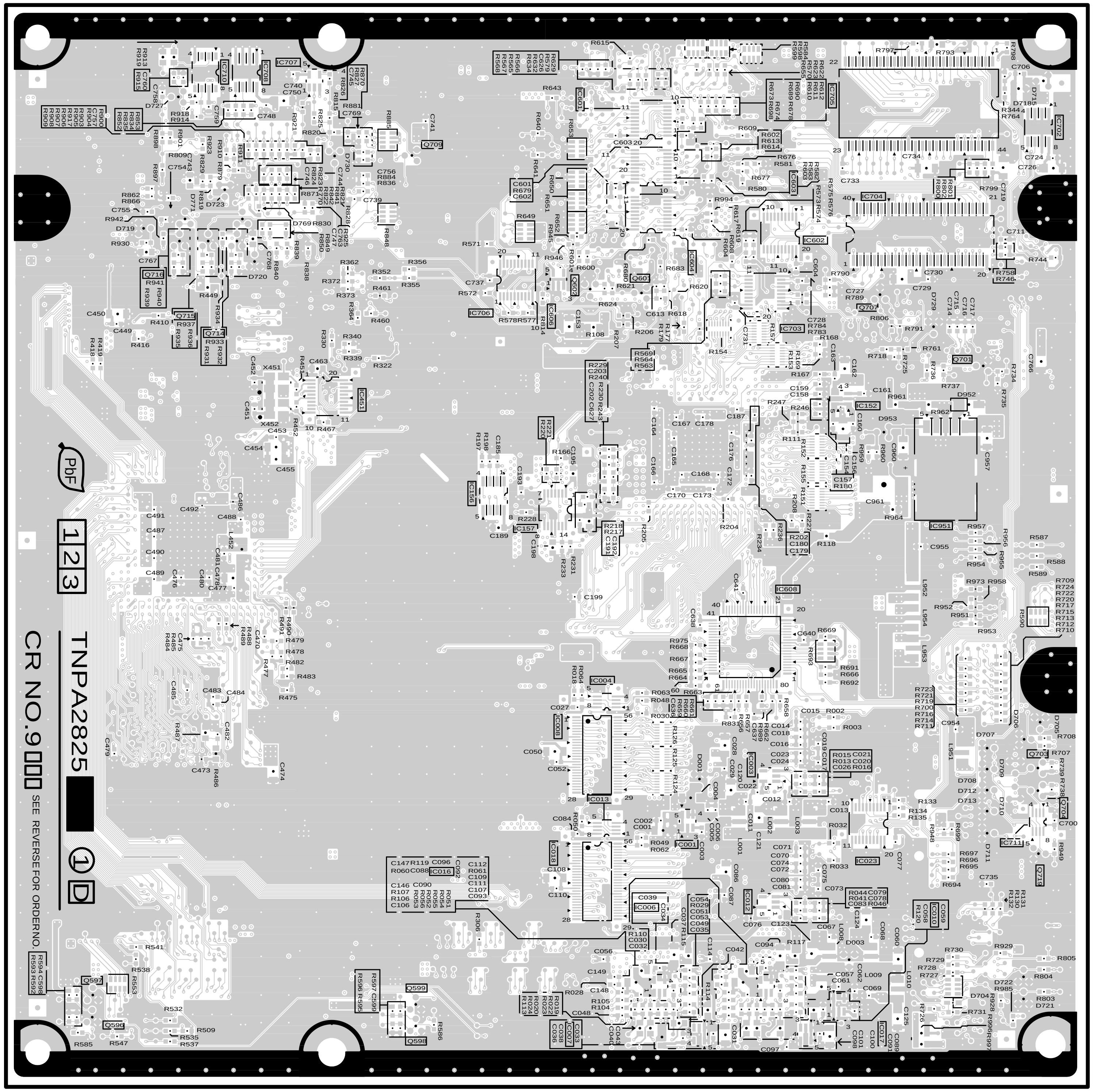
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I

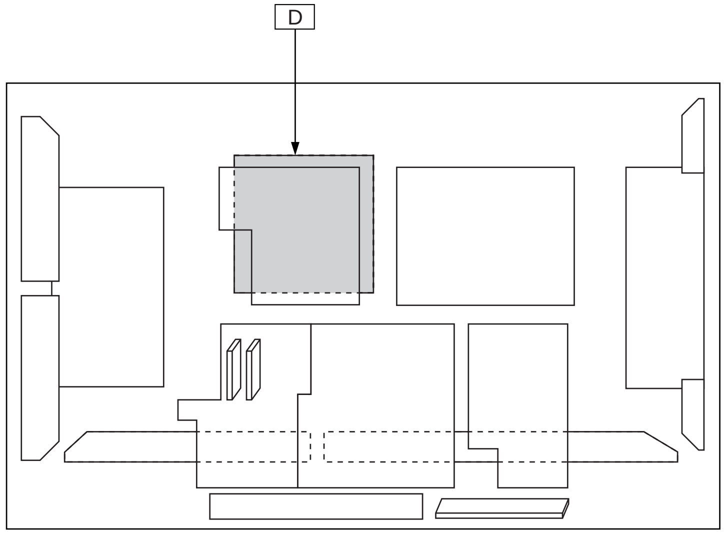


Parts Location

D-BOARD (COMPONENT SIDE)					
IC		**TRANSISTOR**		**TP**	
IC9002	B-3	Q9001	C-3	TP HDM	D-3
IC9005	C-3	Q9002	C-2	TP VDM	D-3
IC9009	C-2	Q9301	D-5	TP0887	D-3
IC9011	B-2	Q9400	F-5	TP0889	D-3
IC9015	C-2	Q9702	B-4		
IC9019	C-2	Q9706	A-4		
IC9151	C-4	Q9708	E-6		
IC9153	D-4	Q9710	A-5		
IC9155	C-3				
IC9301	D-4				
IC9302	D-4				
IC9303	D-5				
IC9452	D-4				
IC9453	E-2				
IC9454	E-3				
IC9455	E-3				
IC9456	E-5				
IC9459	F-5				
IC9605	C-5				
IC9607	D-5				
IC9701	B-5				
IC9709	E-5				
IC9712	B-6				
IC9952	B-3				

D-BOARD(FOIL SIDE)
TXN/D10QCS



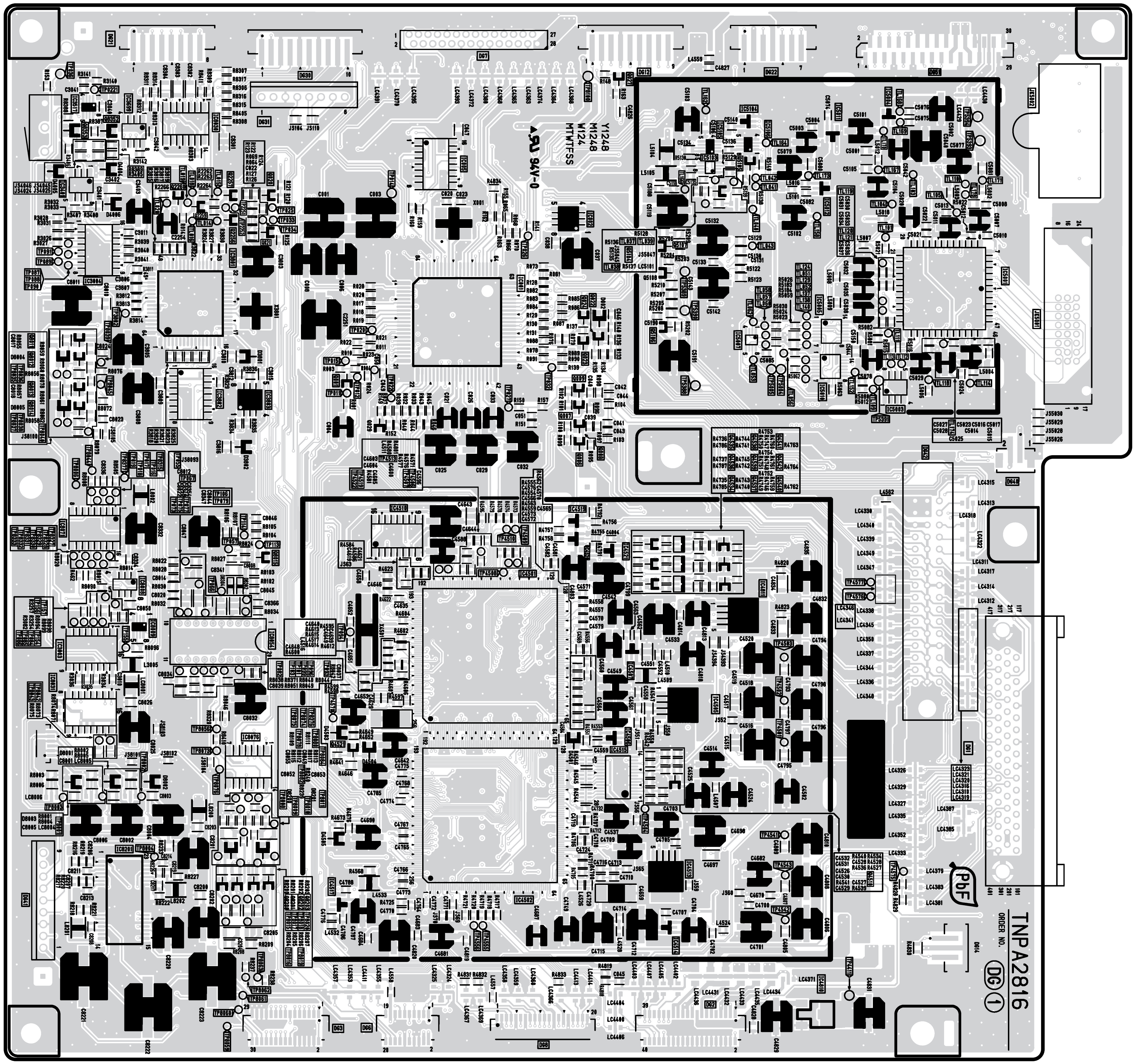


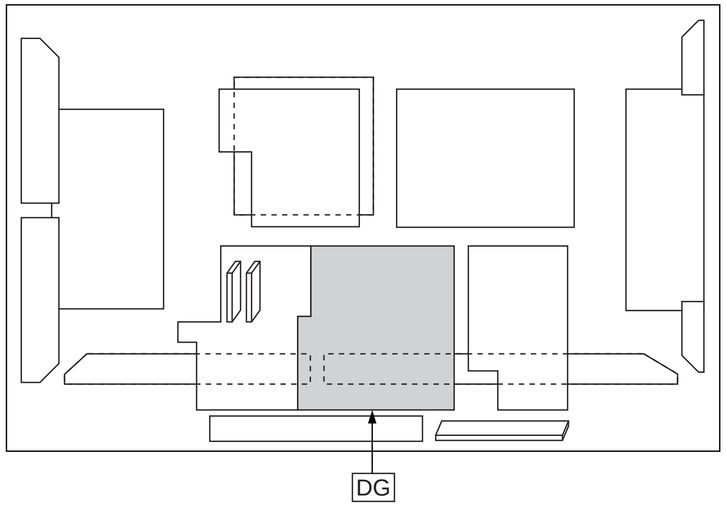
Parts Location

D-BOARD (FOIL SIDE)					
IC				**TRANSISTOR**	
IC9001	D-2	IC9603	D-5	Q9596	A-1
IC9003	D-3	IC9604	D-5	Q9597	A-2
IC9004	D-3	IC9606	C-5	Q9598	C-1
IC9006	D-2	IC9608	D-3	Q9599	C-1
IC9007	D-1	IC9702	F-5	Q9601	D-5
IC9008	D-3	IC9703	D-4	Q9602	D-5
IC9010	E-1	IC9704	E-5	Q9701	E-4
IC9012	D-2	IC9705	E-6	Q9703	F-3
IC9013	D-2	IC9706	C-5	Q9704	F-2
IC9016	C-2	IC9707	B-6	Q9707	E-5
IC9017	E-1	IC9708	B-6	Q9709	C-5
IC9018	D-2	IC9710	B-6	Q9714	B-4
IC9023	E-2	IC9711	F-2	Q9715	B-5
IC9152	E-4	IC9951	E-4	Q9716	B-5
IC9156	C-4			Q9719	F-2
IC9157	C-4				
IC9451	B-4				
IC9601	D-5				
IC9602	D-5				

TH-42PA20U
D-BOARD TXN/D10QCS

DG-BOARD(COMPONENT SIDE)
TNPA2816





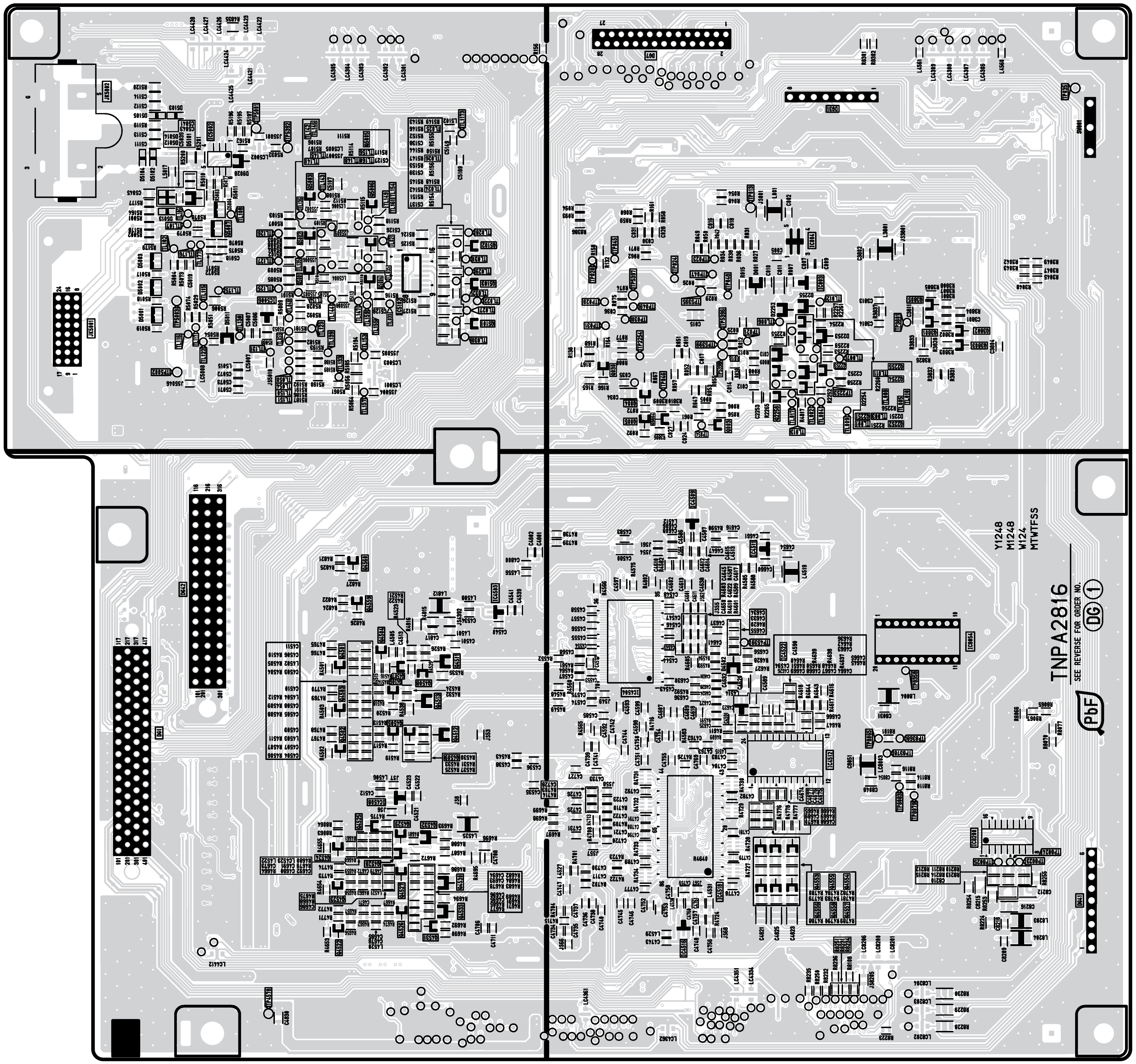
Parts Location

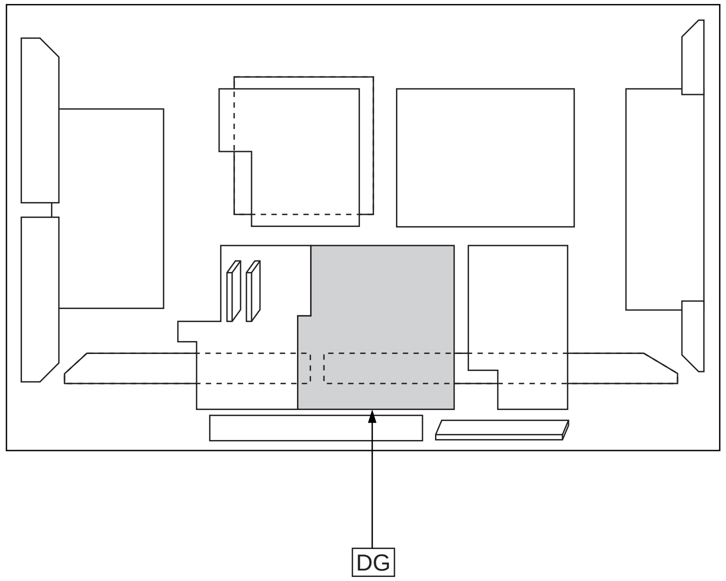
DG-BOARD (COMPONENT SIDE)

IC		TRANSISTOR		TP					
IC001	C-4	Q001	B-4	TP011	B-4	TP156	A-3	TP8018	B-2
IC002	D-5	Q006	D-4	TP012	C-4	TP157	A-3	TP8019	B-1
IC005	C-5	Q007	D-4	TP014	C-5	TP2251	B-5	TP8020	B-2
IC3003	A-3	Q008	D-4	TP015	B-4	TP2252	B-5	TP8035	A-4
IC3004	A-5	Q009	D-4	TP016	A-4	TP3802	A-4	TP8036	A-4
IC3401	A-5	Q020	B-5	TP017	A-4	TP4411	E-1	TP8037	A-4
IC3517	A-5	Q021	B-5	TP018	A-4	TP4501	E-2	TP8038	A-4
IC3699	A-5	Q022	D-4	TP019	A-4	TP4502	E-3	TP8039	A-4
IC3801	B-4	Q023	D-4	TP020	C-4	TP4503	E-3	TP8040	A-4
IC3802	B-4	Q024	D-4	TP0221	A-6	TP4504	D-2	TP8042	A-2
IC3803	B-4	Q027	D-6	TP022	C-4	TP4506	C-4	TP8043	A-2
IC4501	C-3	Q029	C-4	TP025	B-5	TP4507	C-4	TP8044	A-4
IC4502	C-2	Q2256	B-5	TP026	C-5	TP4508	C-3	TP8045	A-4
IC4505	D-3	Q2257	B-5	TP027	C-4	TP4509	C-3	TP8056	B-2
IC4506	D-2	Q2259	B-5	TP032	C-4	TP4510	C-3	TP8059	B-1
IC4507	D-3	Q2260	B-5	TP033	B-5	TP4513	C-4	TP8060	B-1
IC4510	C-3	Q4510	D-2	TP034	B-5	TP4519	C-4	TP8061	B-1
IC4513	D-2	Q4521	B-2	TP036	A-6	TP4522	C-4	TP8062	B-1
IC4514	D-1	Q4534	D-3	TP055	B-3	TP4541	E-2	TP8063	B-1
IC4515	D-2	Q4535	D-3	TP057	B-3	TP4542	E-1	TP8073	B-2
IC4517	B-2	Q4536	D-3	TP066	B-3	TP4543	E-2	TP8074	B-2
IC4519	D-3	Q4537	D-3	TP067	B-3	TP4555	C-1	TP8075	B-2
IC4520	D-3	Q4538	D-3	TP073	B-3	TP4556	C-1	TP8076	B-2
IC4521	D-3	Q4539	D-3	TP075	B-3	TP4570	B-2	TP8078	B-2
IC4810	E-1	Q4540	D-3	TP077	B-3	TP4575	E-2	TP8080	B-2
IC4811	D-3	Q4541	D-3	TP079	B-3	TP4576	E-3	TP8082	B-2
IC5001	E-5	Q4542	D-3	TP082	B-3	TP4577	E-3	TP8084	B-2
IC5003	E-4	Q5104	D-5	TP084	A-3	TP5004	E-4	TP8100	D-6
IC5004	E-5	Q5105	D-5	TP085	A-3	TP5005	E-4	TP8315	A-4
IC5005	E-4	Q5106	D-4	TP086	A-3	TP5388	D-4	TP8327	A-3
IC5007	D-4	Q5107	D-5	TP087	A-5	TP5389	D-5	TP8328	A-3
IC5010	E-4	Q5108	D-5	TP088	A-5	TP5390	D-4	TP8329	A-3
IC5011	E-5	Q8011	A-4	TP089	A-5	TP5391	E-4	TP8330	A-3
IC5012	E-5	Q8012	A-4	TP090	A-5	TP5393	F-5	TP8331	A-3
IC5103	D-5	Q8013	A-4	TP091	A-5	TP5394	F-5	TP8332	A-3
IC5104	D-5	Q8014	A-4	TP093	B-3	TP8001	A-2	TP8333	A-3
IC5105	D-5	Q8015	B-3	TP094	B-3	TP8002	A-2	TP8376	B-2
IC5106	D-5	Q8200	B-2	TP096	B-3	TP8003	A-2	TP8377	A-4
IC8008	A-3	Q8201	B-2	TP099	B-3	TP8004	A-2		
IC8009	A-3	Q8202	B-2	TP101	B-3	TP8006	A-4		
IC8030	B-5	Q8203	B-2	TP103	B-3	TP8008	B-2		
IC8031	A-2	Q8352	A-5	TP106	B-3	TP8009	B-2		
IC8054	B-3	Q8353	A-5	TP113	B-3	TP8010	B-2		
IC8071	A-3			TP114	B-3	TP8011	B-2		
IC8076	B-2			TP154	A-3	TP8015	B-2		
IC8201	A-2			TP155	A-3	TP8016	B-1		
						TP8017	B-2		

TH-42PA20U
DG-BOARD TNPA2816

DG-BOARD(FOIL SIDE)
TNPA2816

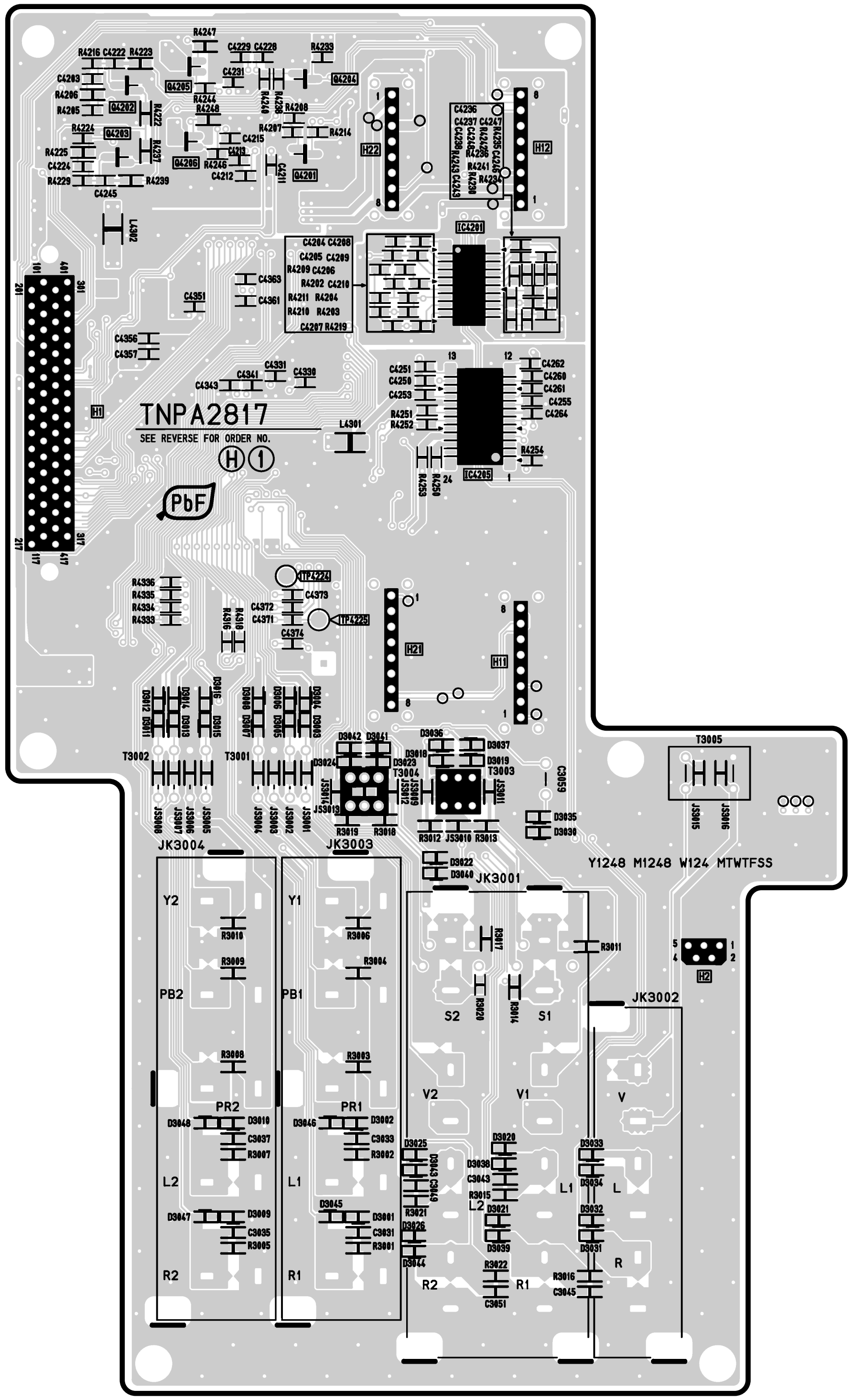




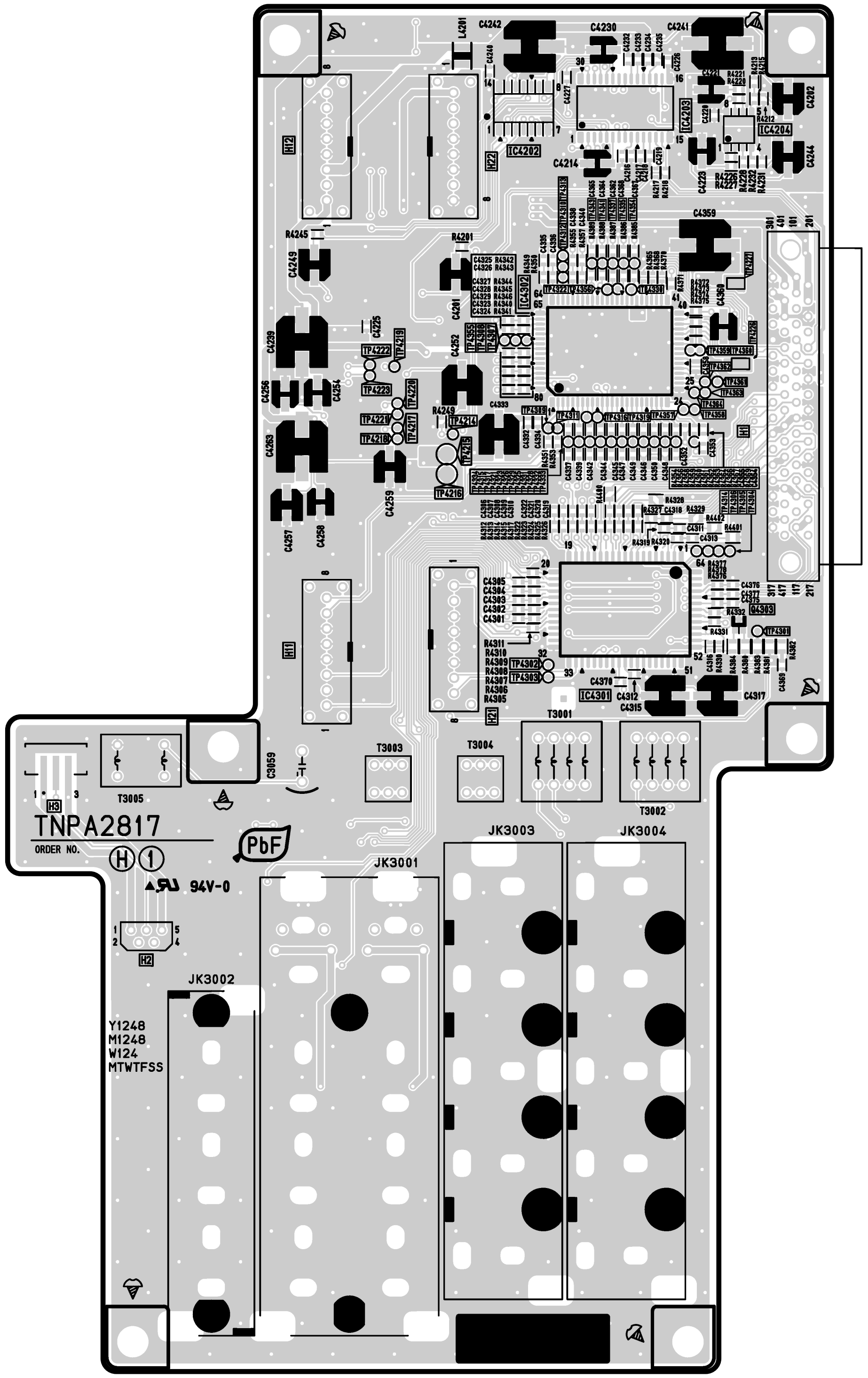
Parts Location

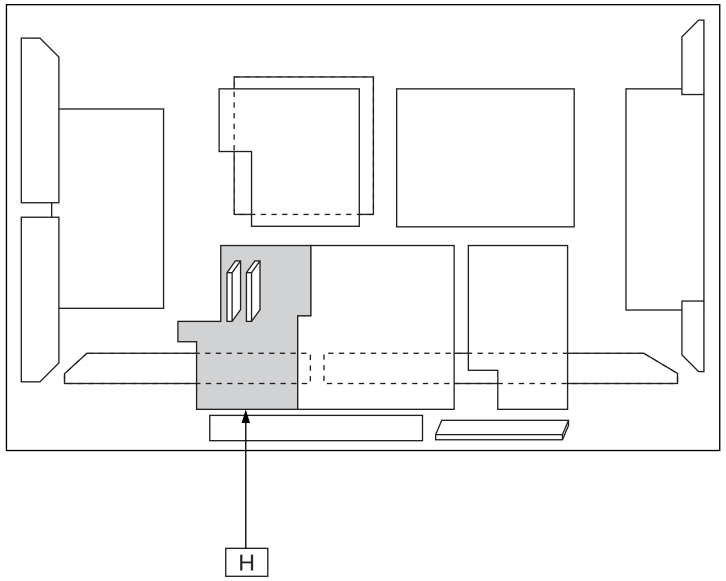
IC		TRANSISTOR		TP	
IC003	E-5	Q4505	C-2	TP013	D-5
IC004	E-5	Q4506	C-3	TP021	D-4
IC4503	C-3	Q4507	C-3	TP023	D-5
IC4504	D-3	Q4508	C-3	TP024	D-5
IC4508	C-2	Q4509	C-2	TP028	D-5
IC4509	D-3	Q4511	C-3	TP029	D-5
IC4511	D-3	Q4512	C-2	TP030	D-4
IC4512	E-2	Q4513	C-3	TP031	D-4
IC4516	D-1	Q4522	B-1	TP035	F-6
IC4518	D-2	Q4523	B-2	TP045	D-5
IC4522	D-2	Q4524	B-2	TP046	D-4
IC5002	B-5	Q4525	C-2	TP047	D-5
IC5006	B-4	Q4526	C-1	TP048	D-5
IC5102	C-5	Q4527	C-2	TP049	D-4
IC8054	E-3	Q4528	C-2	TP054	D-4
IC8200	F-2	Q4529	C-2	TP2253	E-4
		Q4530	C-2	TP2254	D-4
TRANSISTOR		Q4531	C-1	TP3801	E-4
Q003	D-4	Q4532	C-2	TP4539	D-3
Q004	D-4	Q4533	C-1	TP4578	B-1
Q005	D-4	Q4553	D-2	TP5001	B-5
Q030	D-4	Q4554	E-2	TP5002	B-4
Q2251	E-4	Q4555	E-2	TP5003	B-5
Q2252	E-4	Q4556	D-2	TP5392	B-5
Q2253	E-4	Q4557	E-2	TP5395	D-5
Q2254	E-4	Q4558	E-2	TP5396	D-4
Q2255	E-4	Q4559	B-3	TP5397	D-5
Q2258	E-4	Q4560	B-3	TP5398	D-4
Q3801	E-4	Q5001	B-5	TP5399	D-4
Q3802	E-4	Q5002	B-5	TP8023	F-2
Q3803	E-4	Q5003	B-5	TP8024	F-2
Q3804	D-4	Q5004	C-5	TP8025	F-2
Q3805	E-4	Q5005	C-5	TP8065	E-2
Q4501	B-3	Q5006	C-5	TP8079	E-2
Q4502	B-2	Q5007	B-5	TP8083	E-2
Q4503	B-2	Q5101	C-4	TP8358	E-3
Q4504	C-3	Q5102	C-5	TP8368	E-2
		Q5103	C-5	TP8378	E-2

H-BOARD(FOIL SIDE)
TNPA2817


TNPA2817
SEE REVERSE FOR ORDER NO.
PbF
IC4201
IC4205
TP4224
TP4225
H22
H12
H21
H11
H2
JK3004
JK3003
JK3001
JK3002
T3002
T3001
T3005
Y1248 M1248 W124 MTWTFSS
Y2
Y1
PB2
PB1
PR2
PR1
L2
L1
R2
R1
S2
S1
V2
V1
V
L
R
A
B
C
D
E
F
G
H
I
1
2
3
4
5
6

H-BOARD(COMPONENT SIDE)
TNPA2817


TNPA2817
ORDER NO.
PbF
94V-0
IC4202
IC4203
IC4204
IC4301
IC4302
H12
H22
H11
H21
H2
H3
JK3001
JK3002
JK3003
JK3004
T3001
T3002
T3003
T3004
T3005
Y1248
M1248
W124
MTWTFSS



Parts Location

H-BOARD (FOIL SIDE)					
IC		TRANSISTOR		TP	
IC4201	B-5	Q4201	B-5	TP4224	B-4
IC4205	B-4	Q4202	A-5	TP4225	B-3
		Q4203	A-5		
		Q4204	B-5		
		Q4205	A-5		
		Q4206	A-5		

Parts Location

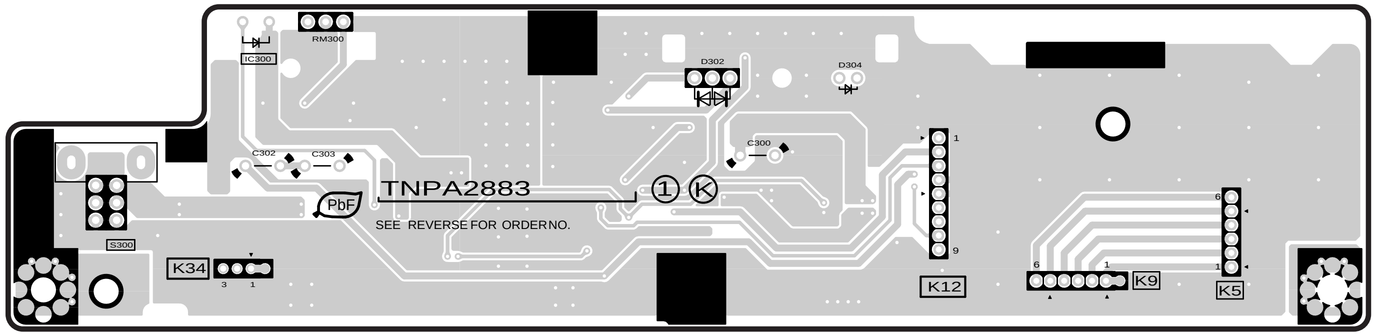
H-BOARD (COMPONENT SIDE)

IC	
IC4202	F-5
IC4203	F-5
IC4204	F-5
IC4301	F-3
IC4302	F-4

TRANSISTOR	
Q4303	F-3

TP					
TP4214	E-4	TP4301	F-3	TP4329	F-4
TP4215	E-4	TP4302	F-3	TP4330	F-5
TP4216	E-4	TP4303	F-3	TP4331	F-4
TP4217	E-4	TP4304	F-4	TP4332	F-4
TP4218	E-4	TP4305	F-4	TP4333	F-4
TP4219	E-4	TP4306	F-4	TP4334	F-4
TP4220	E-4	TP4307	F-4	TP4335	F-5
TP4221	E-4	TP4308	F-4	TP4337	F-5
TP4222	E-4	TP4309	F-4	TP4341	F-5
TP4223	E-4	TP4310	F-5	TP4343	F-5
TP4226	F-4	TP4311	F-4	TP4354	F-5
TP4227	F-5	TP4312	F-5	TP4355	F-4
		TP4313	F-5	TP4356	F-5
		TP4314	F-4	TP4357	F-4
		TP4315	F-4	TP4358	F-4
		TP4316	F-4	TP4359	F-4
		TP4317	F-4	TP4360	F-4
		TP4319	F-4	TP4361	F-4
		TP4321	F-4	TP4362	F-4
		TP4322	F-5	TP4363	F-4
		TP4323	F-4	TP4364	F-4
		TP4325	F-4		
		TP4326	F-4		
		TP4328	F-4		

K-BOARD(FOIL SIDE)
TXN/K1QCSU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D302
D304
C300
C302
C303
TNPA2883
① Ⓚ
PbF
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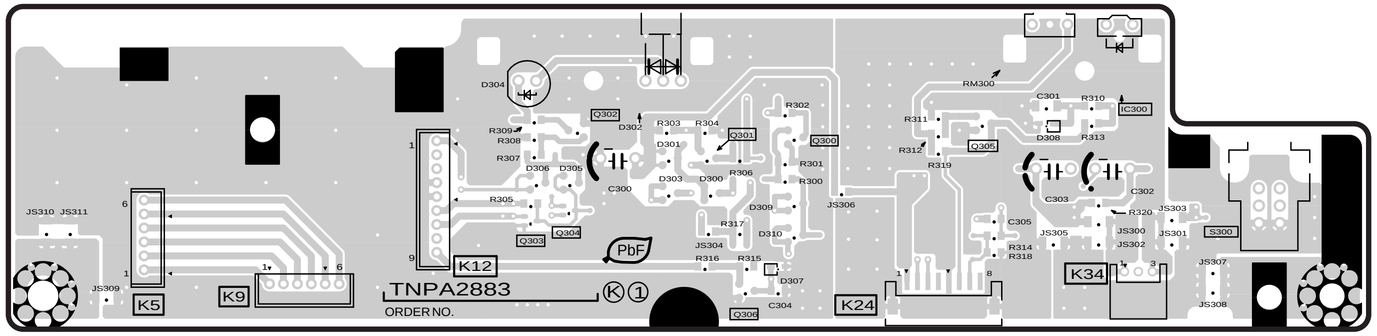
S300
K34
K12
K9
K5

K-BOARD(COMPONENT SIDE)
TXN/K1QCSU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JS309
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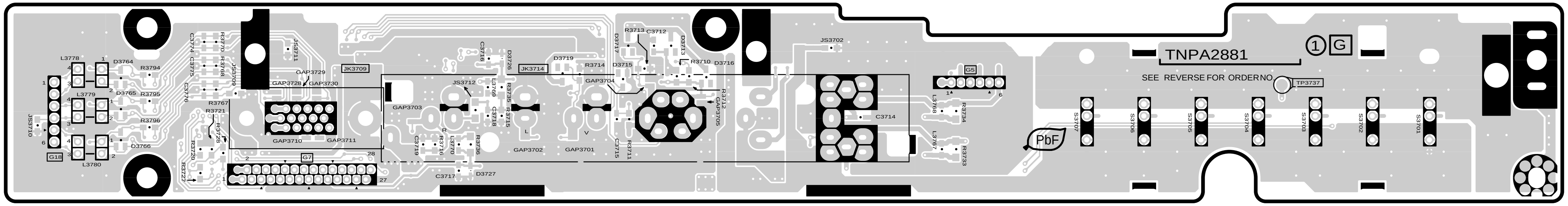
K9
K12
D304
Q302
Q301
Q300
Q303
Q304
Q305
Q306
RM300
IC300
TNPA2883
ORDER NO.
Ⓚ①
PbF
K24
K34
S300
JS306
JS307
JS308

G-BOARD(FOIL SIDE)
TXN/G1QCSU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GAP3701
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JS3702
TNPA2881
① Ⓖ
SEE REVERSE FOR ORDER NO.
TP3737
PbF
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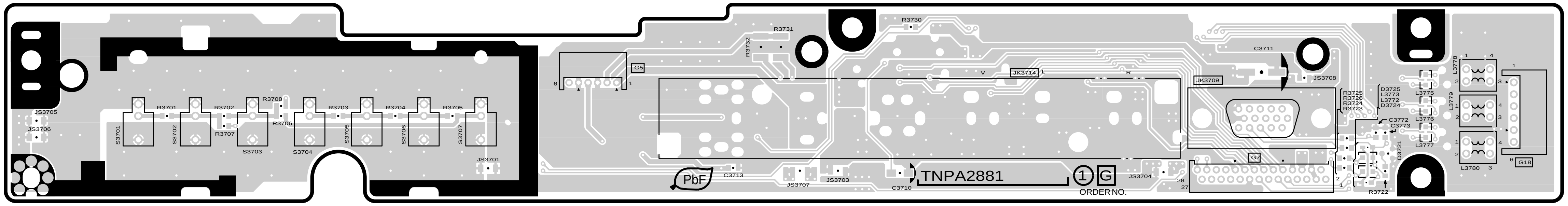
S3706
S3705
S3704
S3703
S3702
S3701

G-BOARD(COMPONENT SIDE)
TXN/G1QCSU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ORDER NO.
PbF
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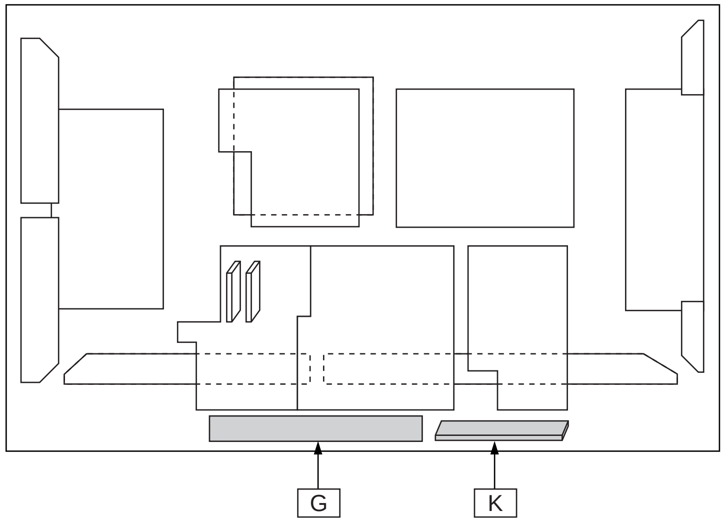

Parts Location

K-BOARD (FOIL SIDE)			
IC			
IC300	B-6		

Parts Location

K-BOARD (COMPONENT SIDE)			
IC		TRANSISTOR	
IC300	D-4	Q300	C-4
		Q301	C-4
		Q302	C-4
		Q303	C-4
		Q304	C-4
		Q305	D-4
		Q306	C-4

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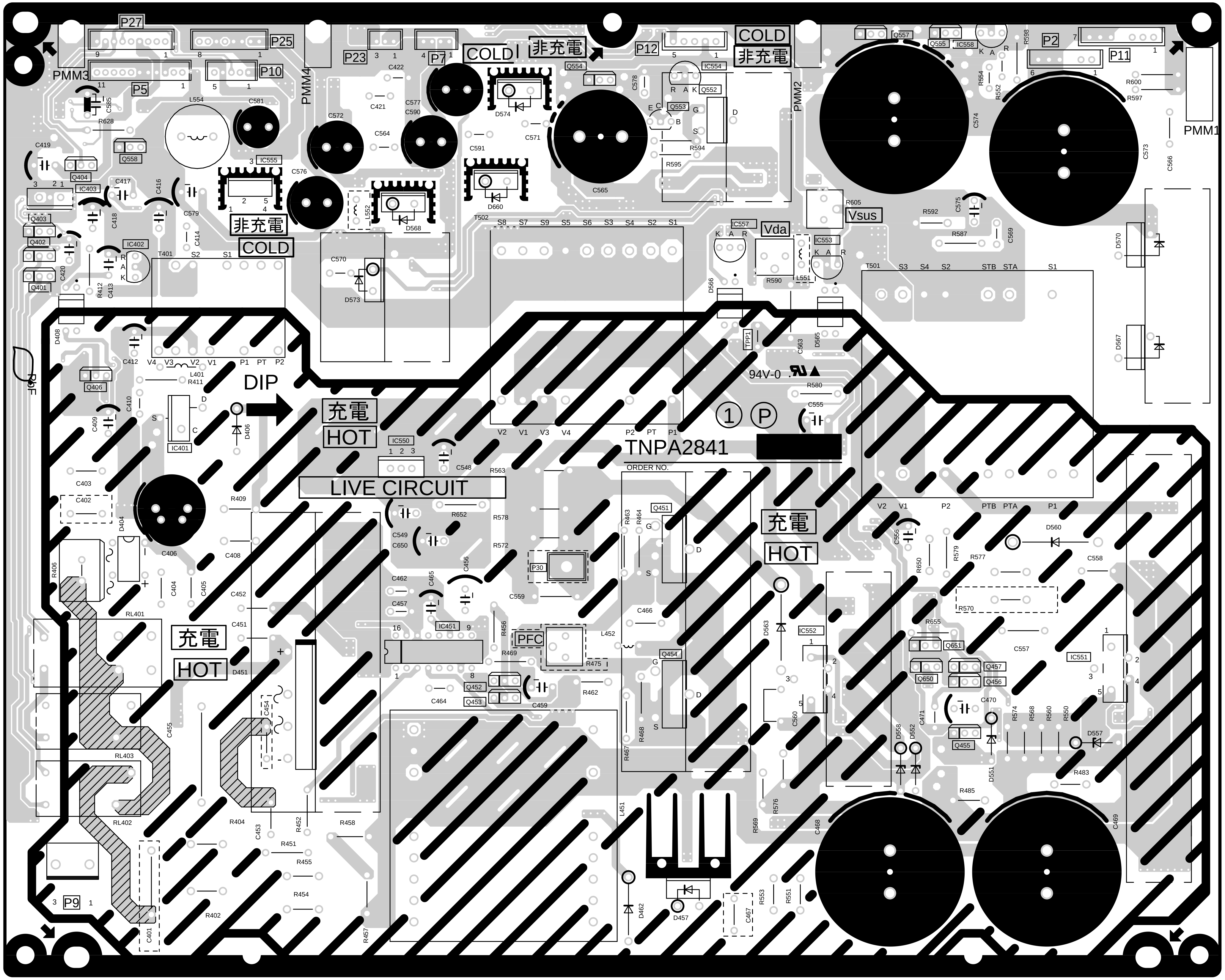
A B C D E F G H I

P-BOARD(COMPONENT SIDE)
TNPA2841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P12
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PMM1
PMM2
PMM3
PMM4
P5
P10
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IC554
Q552
Q553
Q554
Q557
Q555
IC558
L554
C581
C572
C576
C577
C590
C564
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C571
C565
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D660
D568
L552
C570
D573
T502
S8
S7
S9
S5
S6
S3
S4
S2
S1
Vda
Vsus
IC557
IC553
R590
L551
T501
STB
STA
D570
D567
Q558
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IC402
Q401
T401
C419
C417
C416
C418
C579
C414
C420
R412
C413
R628
C585
非充電
COLD
D408
C412
Q406
L401
R411
V4
V3
V2
V1
P1
PT
P2
DIP
充電
HOT
D406
IC401
C410
C409
C403
C402
C406
D404
C404
C405
C408
R406
RL401
RL403
RL402
R409
IC550
C548
LIVE CIRCUIT
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R652
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C549
C650
R572
C456
C462
C465
C457
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C559
IC451
R456
PFC
R469
L452
R475
Q452
Q453
C464
C459
R462
C452
C451
充電
HOT
D451
C455
C454
C453
R404
R452
R451
R455
R454
R402
R458
R457
C401
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TPP1
C563
D565
D566
94V-0
R580
C555
①
Ⓟ
TNPA2841
ORDER NO.
Q451
R463
R464
C466
Q454
R468
R467
充電
HOT
D563
IC552
C560
D560
C558
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R579
R650
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R570
R655
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IC551
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Q456
C470
C471
Q455
D558
D552
D551
R574
R568
R560
R550
D557
R483
R485
C468
C469
L451
D462
D457
C467
R553
R551
R569
R576
R592
R587
C575
C569
R605
C574
C573
C566
R600
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R594
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R554
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C578
C421
C422
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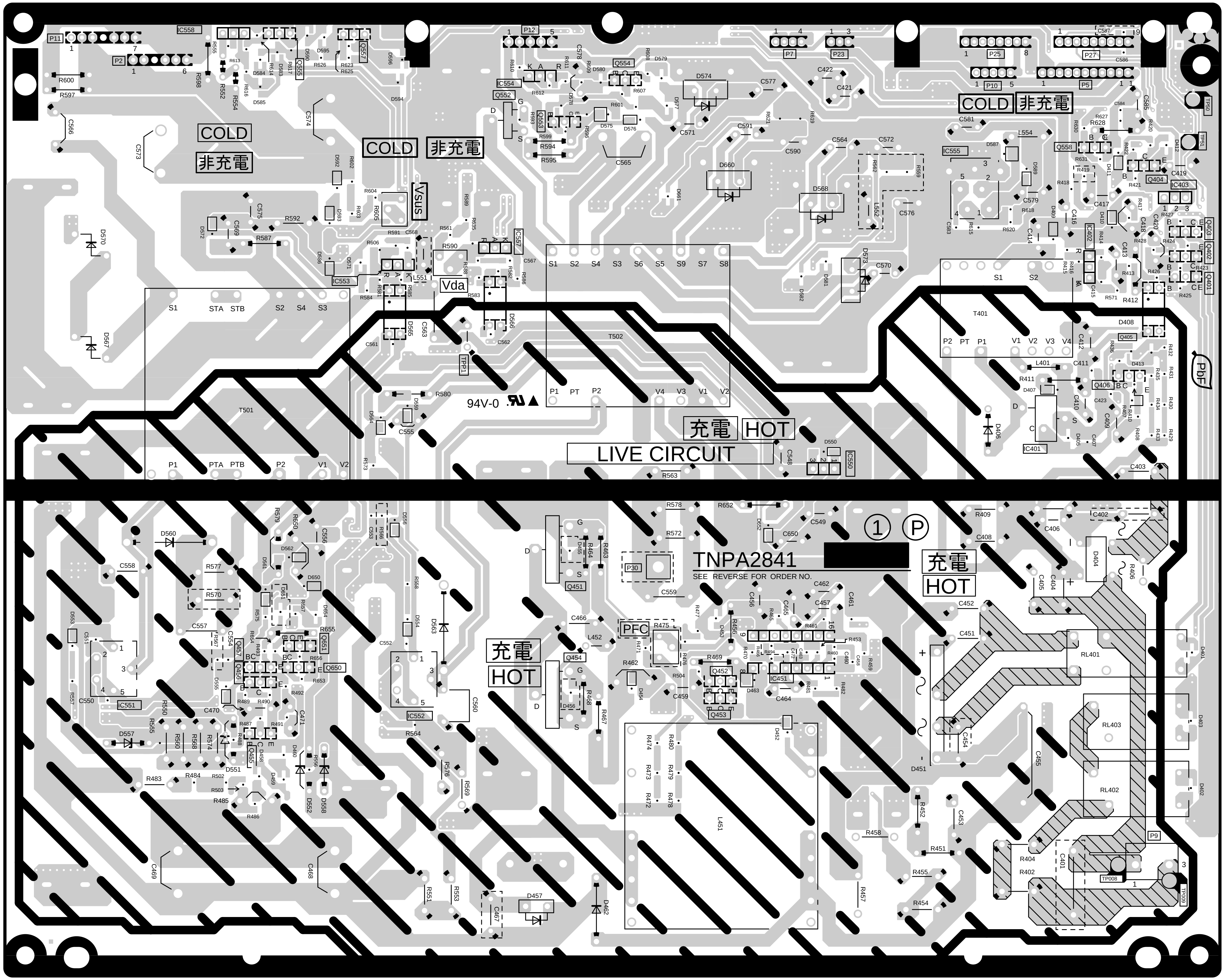
P-BOARD(FOIL SIDE)
TNPA2841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非充電
Vsus
Vda
T501
T502
T401
94V-0
PbF
充電
HOT
LIVE CIRCUIT
TNPA2841
SEE REVERSE FOR ORDER NO.
PFC
L451
RL401
RL402
RL403
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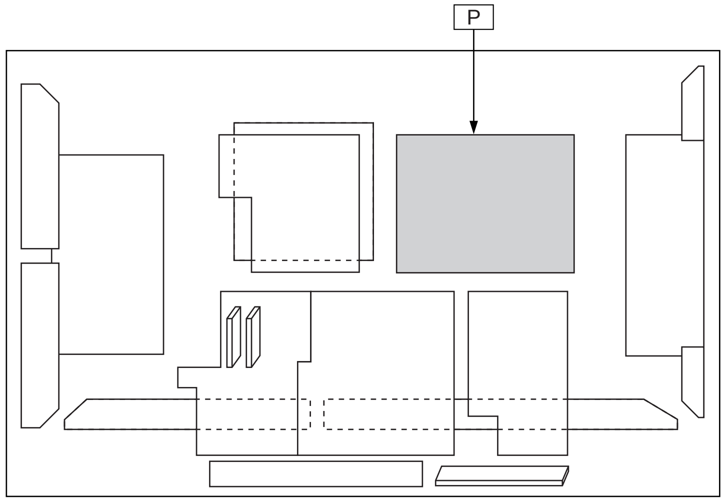
TH-42PA20U
P-BOARD TNPA2841

TH-42PA20U
P-BOARD TNPA2841



Parts Location

P-BOARD (FOIL SIDE)					
IC		**TRANSISTOR**		**TP**	
IC401	G-4	Q401	H-5	TP008	H-1
IC402	H-5	Q402	H-5	TP009	H-1
IC403	H-5	Q403	H-5	TP50	H-6
IC451	F-3	Q404	H-5	TP61	H-5
IC550	F-4	Q405	H-4	TPP1	D-4
IC551	B-3	Q406	H-4		
IC552	D-2	Q451	E-3		
IC553	D-5	Q452	F-2		
IC554	E-6	Q453	F-2		
IC555	G-5	Q454	E-2		
IC557	D-5	Q455	C-2		
IC558	C-6	Q456	C-3		
		Q457	C-3		
		Q552	D-6		
		Q553	E-6		
		Q554	E-6		
		Q555	C-6		
		Q557	D-6		
		Q558	H-5		
		Q650	C-3		
		Q651	C-3		

Parts Location

P-BOARD (COMPONENT SIDE)					
IC		**TRANSISTOR**		**TP**	
IC401	C-4	Q401	B-5	TPP1	F-4
IC402	B-5	Q402	B-5		
IC403	B-5	Q403	B-5		
IC451	D-3	Q404	B-5		
IC550	D-4	Q406	B-4		
IC551	H-3	Q451	E-3		
IC552	F-3	Q452	D-2		
IC553	F-5	Q453	D-2		
IC554	E-6	Q454	E-2		
IC555	C-5	Q455	G-2		
IC557	F-5	Q456	G-2		
IC558	G-6	Q457	G-3		
		Q552	F-6		
		Q553	E-6		
		Q554	E-6		
		Q555	G-6		
		Q557	G-6		
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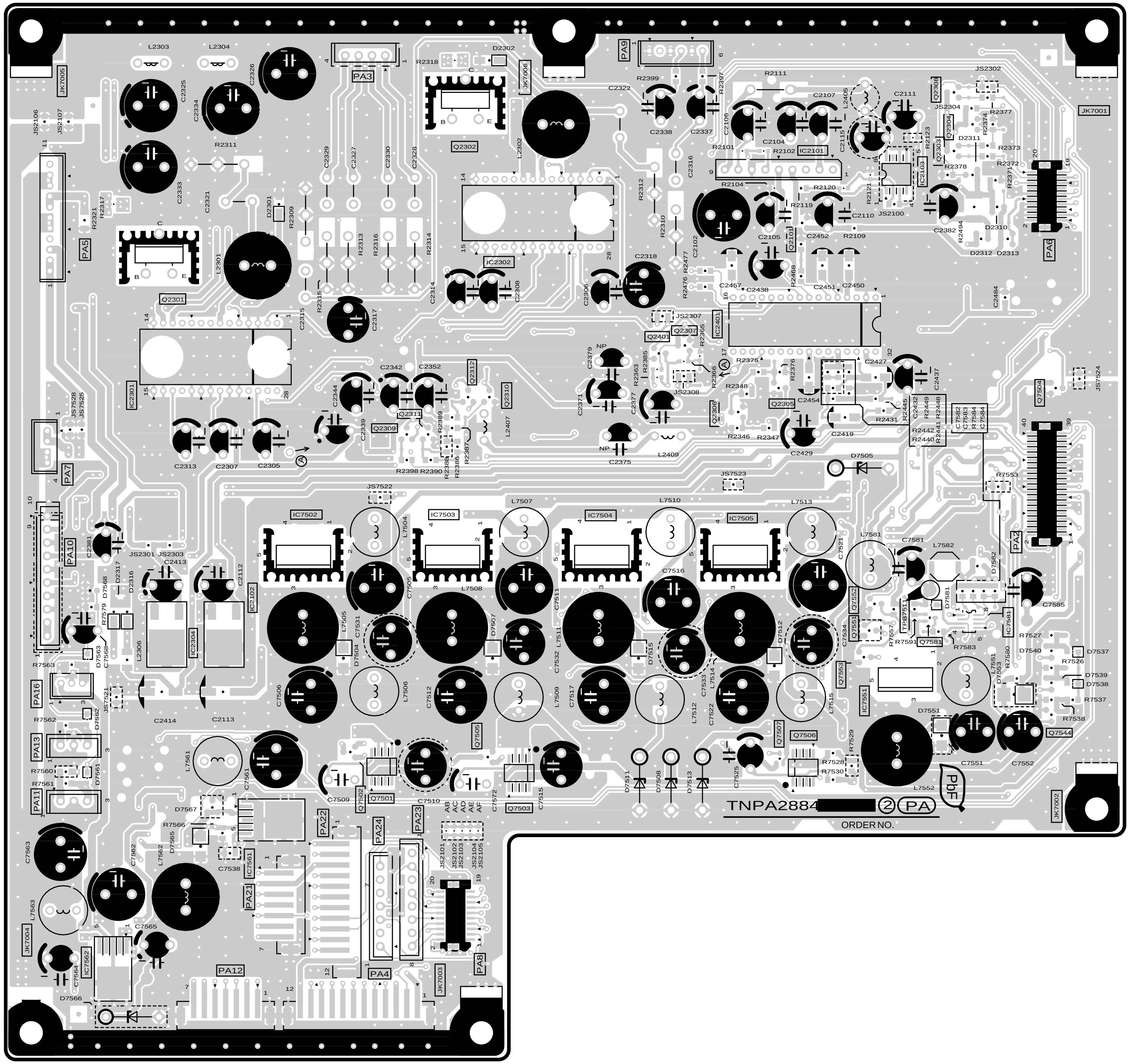
		Q650	G-2		
		Q651	G-3		

PA-BOARD(COMPONENT SIDE)
TXNPA1QCSU



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IC2103
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ORDER NO.
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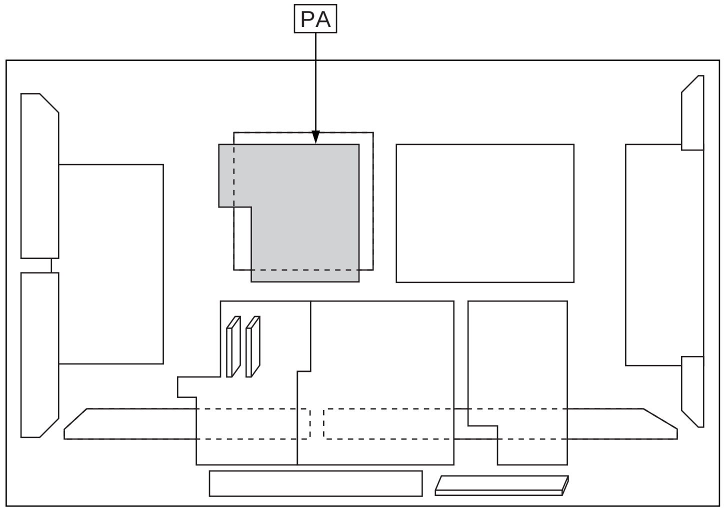
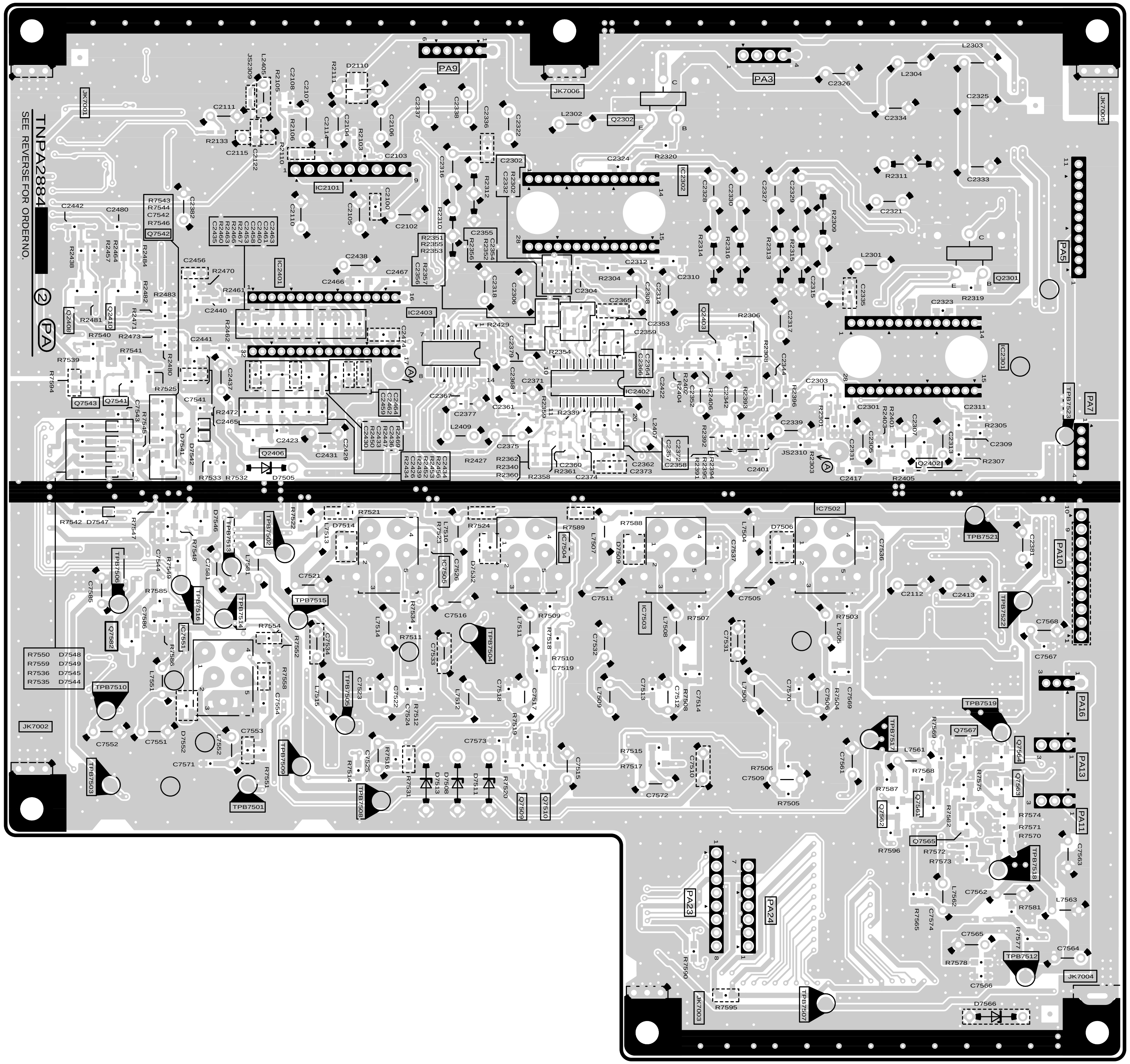


Parts Location

PA-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR		TP	
IC2101	E-5	Q2101	E-5	TPB7511	F-3
IC2102	B-3	Q2301	B-5		
IC2103	F-5	Q2302	D-5		
IC2301	B-4	Q2303	F-5		
IC2302	D-5	Q2304	F-5		
IC2304	B-3	Q2305	E-4		
IC2401	E-4	Q2306	E-4		
IC7502	C-3	Q2307	E-4		
IC7503	C-3	Q2308	F-5		
IC7504	D-3	Q2309	C-4		
IC7505	E-3	Q2310	D-4		
IC7551	F-3	Q2311	C-4		
IC7561	B-2	Q2312	D-4		
IC7562	B-1	Q2401	E-4		
IC7581	F-3	Q7501	C-2		
		Q7502	C-2		
		Q7503	D-2		
		Q7504	F-4		
		Q7505	D-2		
		Q7506	E-2		
		Q7507	E-2		
		Q7544	F-2		
		Q7551	E-3		
		Q7552	E-3		
		Q7553	E-3		
		Q7581	F-3		

PA-BOARD(FOIL SIDE)
TXNPA1QCSU


TNPA2884
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IC2301
IC2302
IC2401
IC2402
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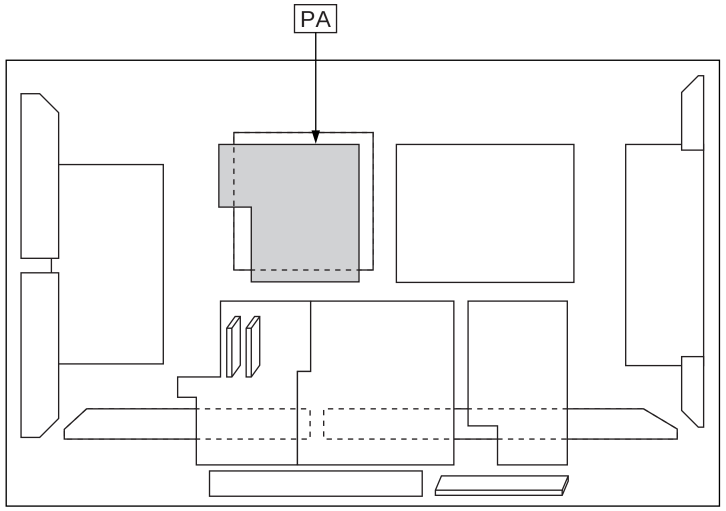

Parts Location

PA-BOARD (FOIL SIDE)					
IC		TRANSISTOR		TP	
IC2101	C-5	Q2301	F-5	TPB7501	B-2
IC2301	F-4	Q2302	D-5	TPB7502	C-3
IC2302	D-5	Q2402	F-4	TPB7503	B-2
IC2401	C-5	Q2403	E-4	TPB7504	C-3
IC2402	D-4	Q2406	C-4	TPB7505	C-2
IC2403	C-4	Q2408	B-4	TPB7506	B-3
IC7502	E-3	Q2410	B-4	TPB7507	E-1
IC7503	D-3	Q7509	D-2	TPB7508	C-2
IC7504	D-3	Q7510	D-2	TPB7509	C-2
IC7505	C-3	Q7541	B-4	TPB7510	B-2
IC7551	B-3	Q7542	B-4	TPB7512	F-1
		Q7543	B-4	TPB7513	B-3
		Q7561	F-2	TPB7514	B-3
		Q7562	F-2	TPB7515	C-3
		Q7563	F-2	TPB7516	B-3
		Q7564	F-2	TPB7517	F-2
		Q7565	F-2	TPB7518	F-2
		Q7567	F-2	TPB7519	F-2
		Q7582	B-3	TPB7521	F-3
				TPB7522	F-3
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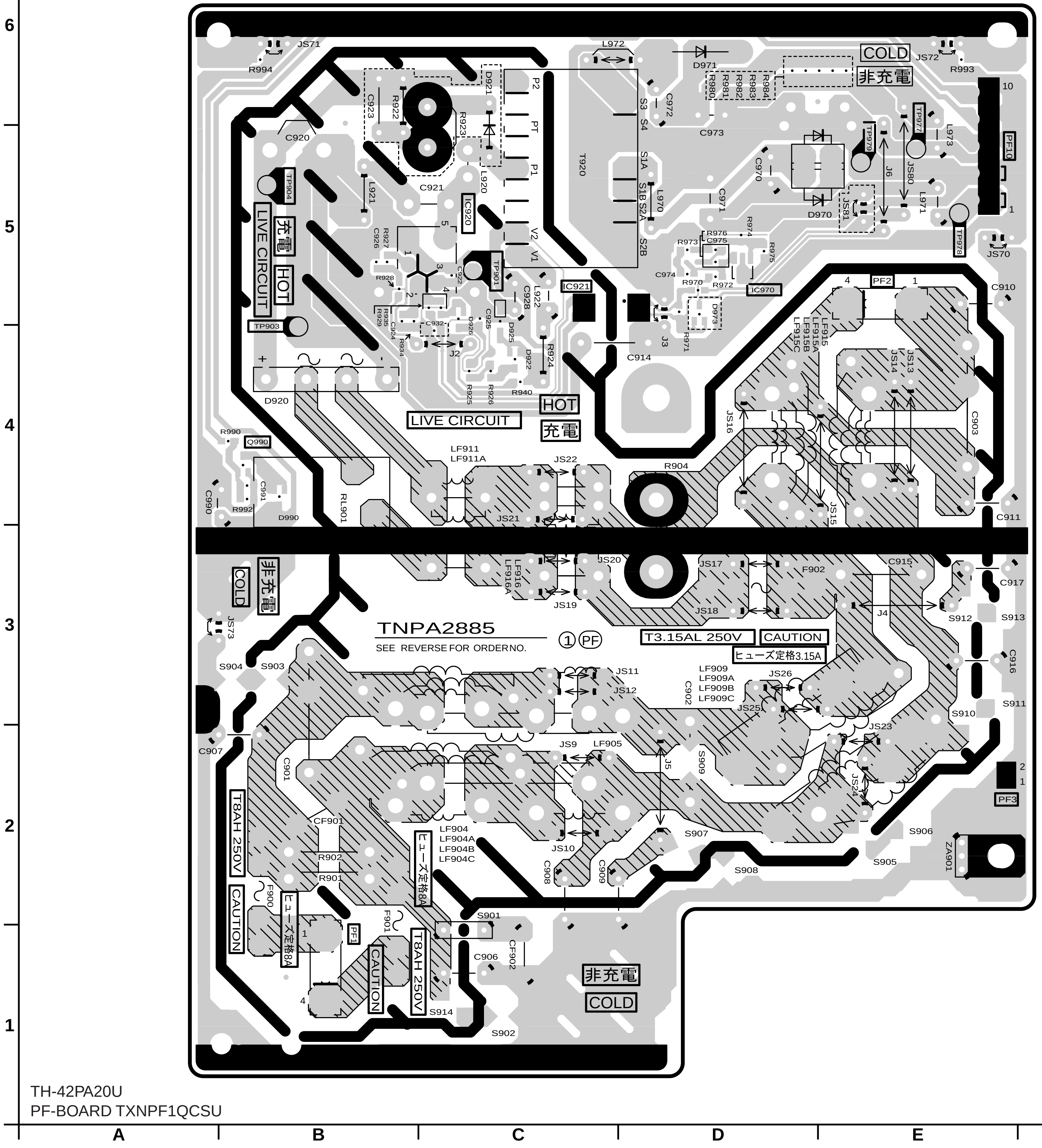
PF-BOARD
TXNPF1QCSU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R922
R923
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PT
P1
T920
S3
S4
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S1B
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R983
R984
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TP979
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PF10
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TP904
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充電
HOT
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V1
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C970
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JS81
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J3
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LF915C
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R925
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C990
R992
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RL901
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JS15
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JS20
LF916
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F902
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C917
JS19
JS18
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S913
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① PF
T3.15AL 250V
CAUTION
ヒューズ定格3.15A
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JS23
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JS9
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JS24
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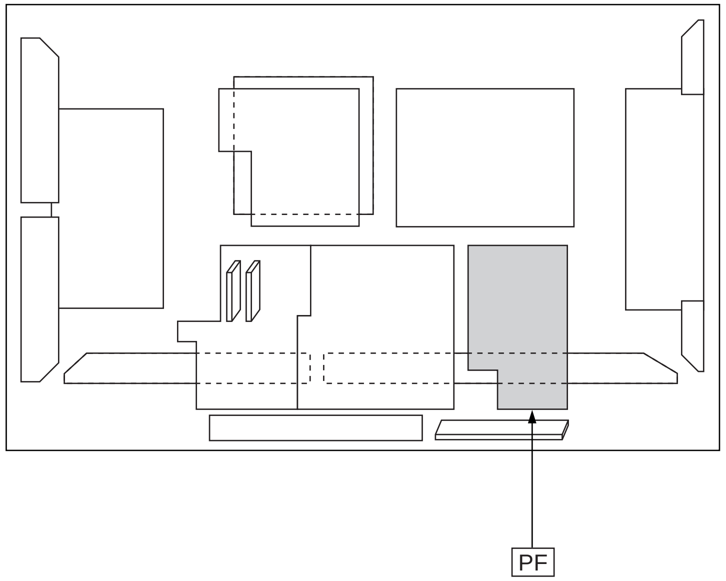
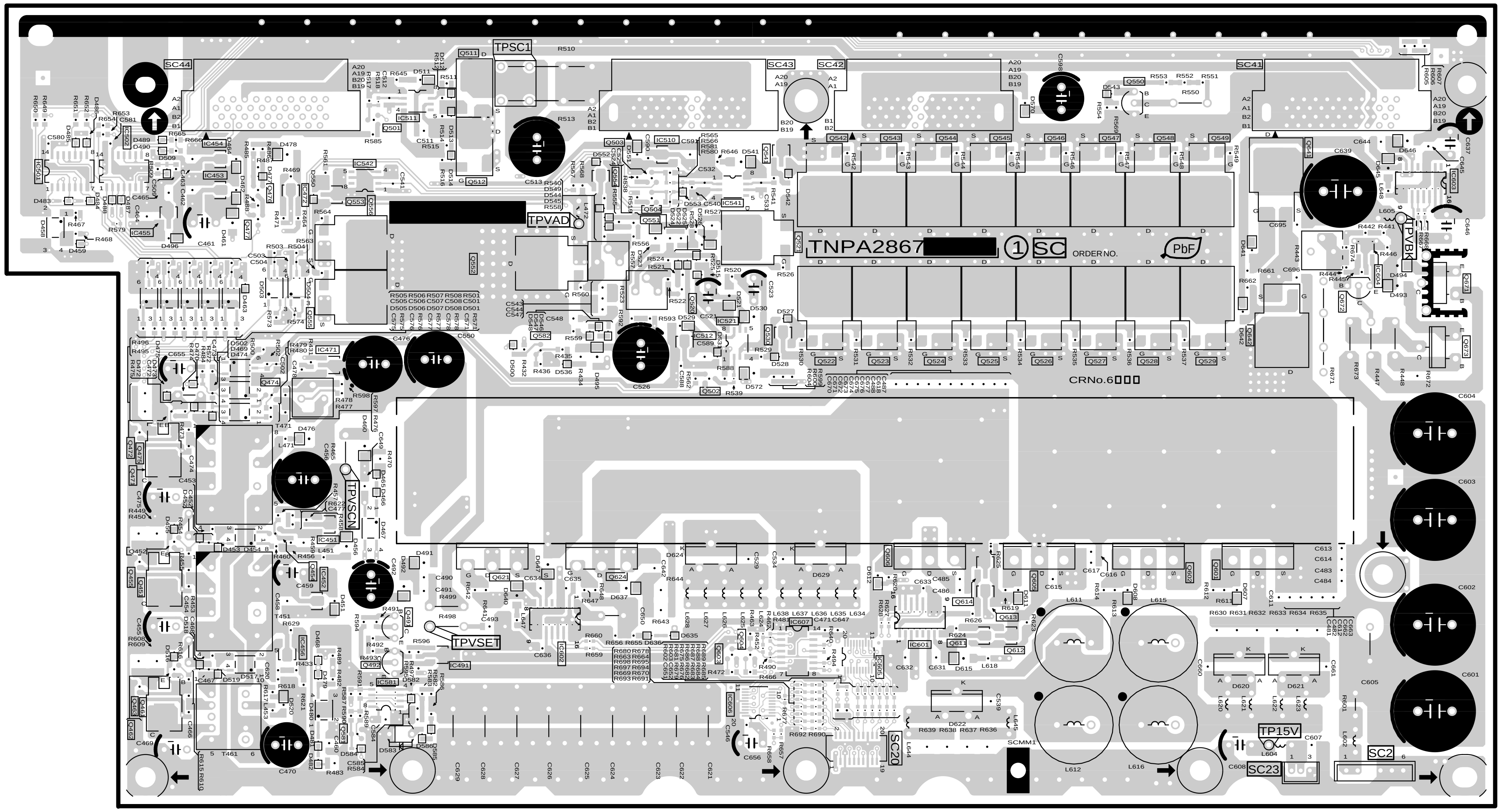


Parts Location

PF-BOARD			
IC		**TP**	
IC920	C-5	TP901	C-5
IC921	C-5	TP903	B-4
IC970	D-5	TP904	B-5
TRANSISTOR		TP977	E-5
Q990	B-4	TP978	E-5
		TP979	E-5

SC-BOARD(COMPONENT SIDE)
TXNSC10QBS



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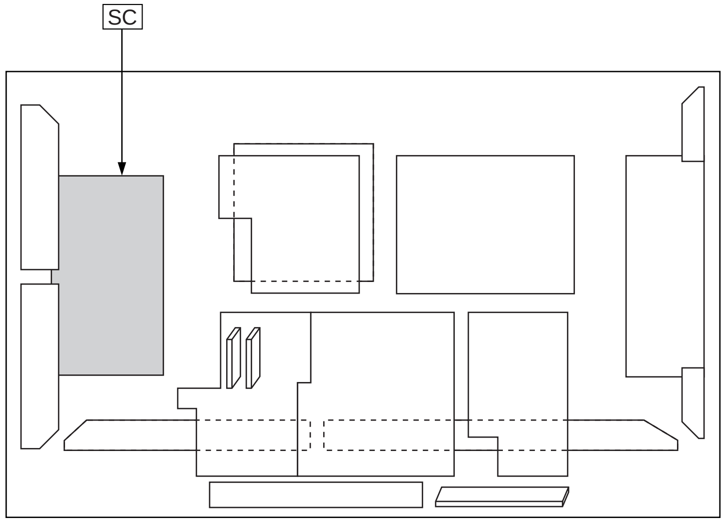
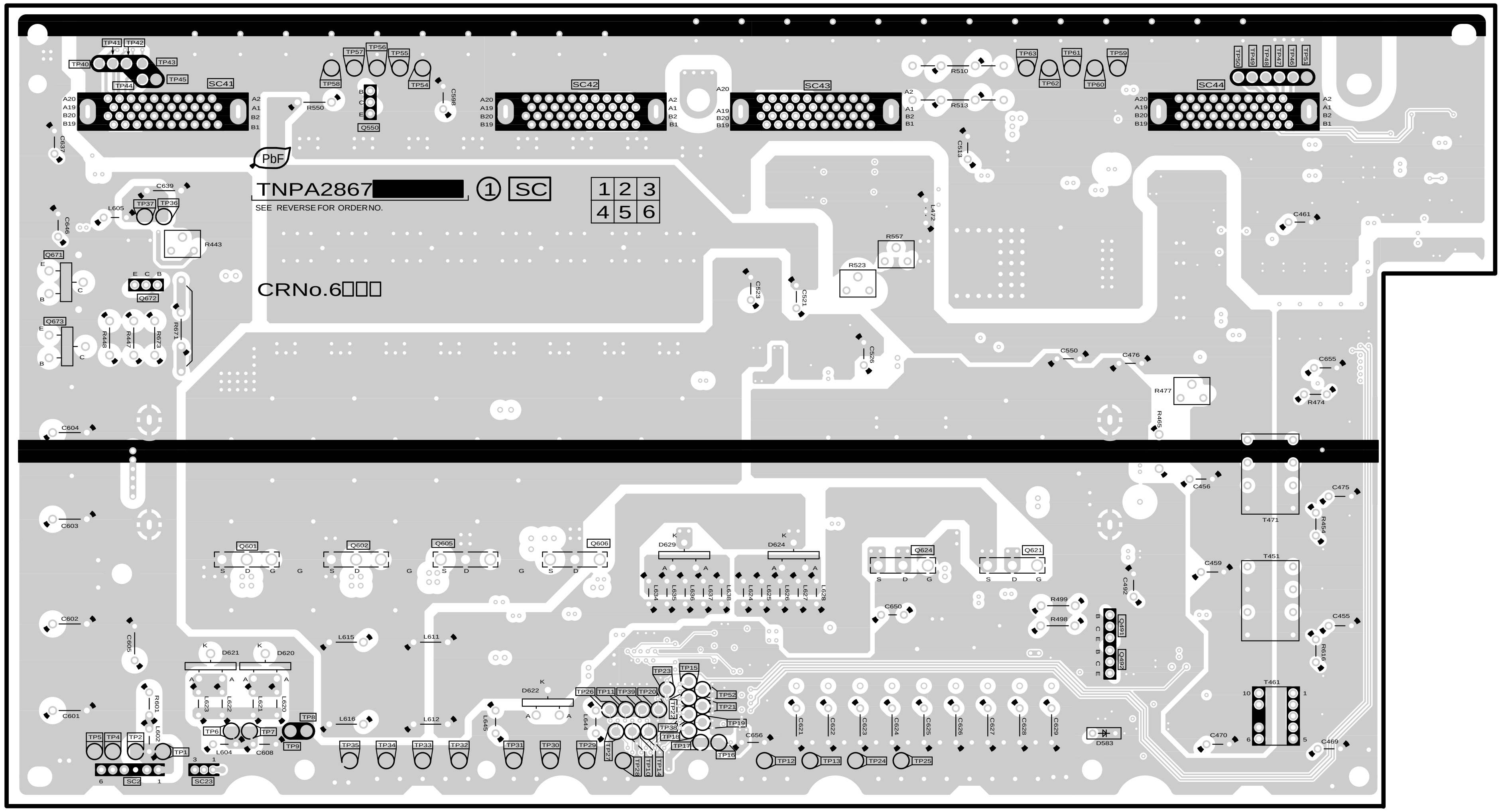


SC-BOARD(FOIL SIDE)
TXNSC10QBS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TP40 TP41 TP42 TP43 TP44 TP45
TP54 TP55 TP56 TP57 TP58
TP59 TP60 TP61 TP62 TP63
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TP12 TP13 TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP23 TP24 TP25 TP26
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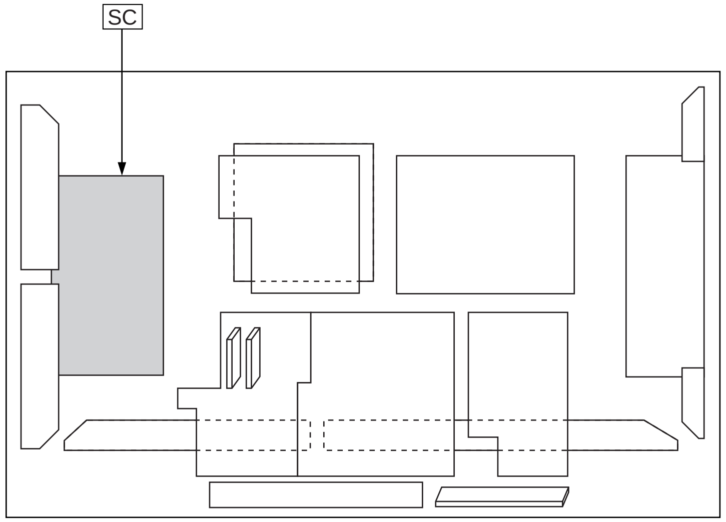
C455 C456 C459 C461 C469 C470 C475 C476 C550 C601 C602 C603 C604 C608 C639 C650 C655 C656
L604 L605 L611 L612 L615 L616
A20 A19 B20 B19
A2 A1 B2 B1



6
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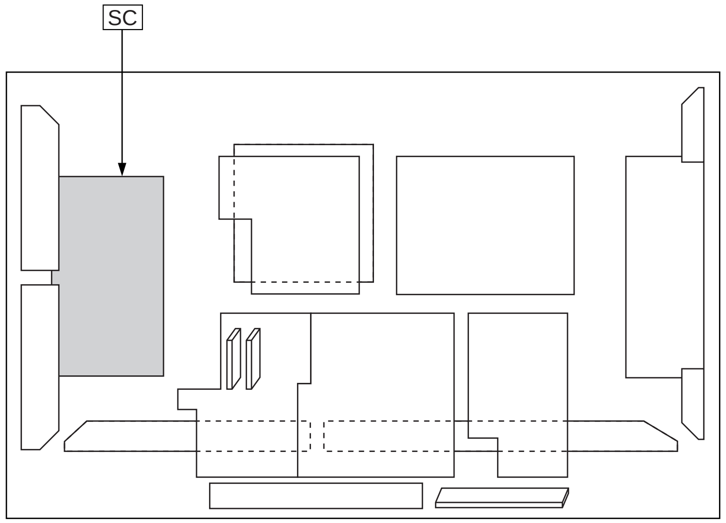
A B C D E F G H I



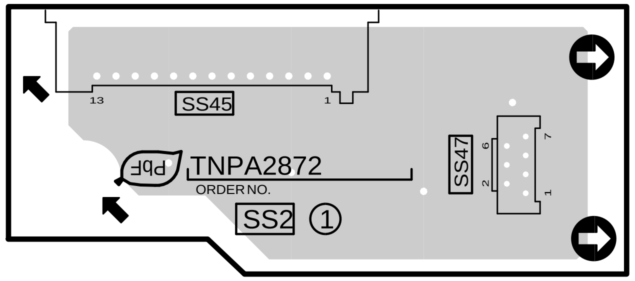
Parts Location

SC-BOARD (FOIL SIDE)					
TRANSISTOR		**TP**		TP38	D-2
Q6491	E-3	TP1	A-2	TP39	C-2
Q6492	E-2	TP10	C-2	TP4	A-2
Q6550	B-5	TP11	C-2	TP40	A-5
Q6601	B-3	TP12	D-2	TP41	A-5
Q6602	B-3	TP13	D-2	TP42	A-5
Q6605	C-3	TP14	D-2	TP43	A-5
Q6606	C-3	TP15	D-2	TP44	A-5
Q6621	E-3	TP16	D-2	TP45	A-5
Q6624	E-3	TP17	D-2	TP46	F-5
Q6671	A-4	TP18	D-2	TP47	F-5
Q6672	A-4	TP19	D-2	TP48	F-5
Q6673	A-4	TP2	A-2	TP49	F-5
		TP20	D-2	TP5	A-2
		TP21	D-2	TP50	F-5
		TP22	D-2	TP51	F-5
		TP23	D-2	TP52	D-2
		TP24	D-2	TP54	C-5
		TP25	E-2	TP55	B-5
		TP26	C-2	TP56	B-5
		TP27	C-2	TP57	B-5
		TP28	C-2	TP58	B-5
		TP29	C-2	TP59	E-5
		TP30	C-2	TP6	B-2
		TP31	C-2	TP60	E-5
		TP32	C-2	TP61	E-5
		TP33	C-2	TP62	E-5
		TP34	B-2	TP63	E-5
		TP35	B-2	TP7	B-2
		TP36	A-4	TP8	B-2
		TP37	A-4	TP9	B-2

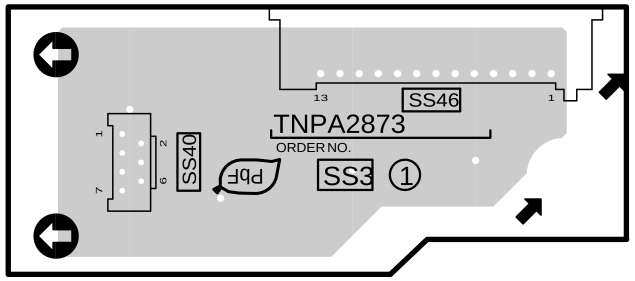
Parts Location

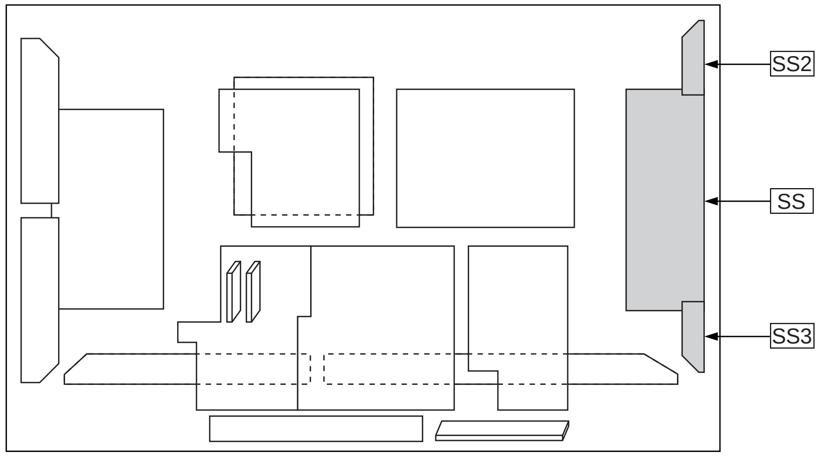
SC-BOARD (COMPONENT SIDE)							
IC		**TRANSISTOR**		Q6542	D-4	**TP**	
IC6451	B-3	Q6451	A-3	Q6543	D-4	TP15V	F-2
IC6452	B-3	Q6452	A-3	Q6544	E-4	TPSC1	C-5
IC6453	B-4	Q6454	B-3	Q6545	E-4	TPVAD	C-4
IC6454	B-5	Q6455	A-3	Q6546	E-4	TPVBK	G-4
IC6455	A-4	Q6461	A-2	Q6547	E-4	TPVSCN	B-3
IC6456	B-2	Q6462	A-2	Q6548	F-5	TPVSET	C-3
IC6471	B-4	Q6463	A-2	Q6549	F-5		
IC6472	B-4	Q6471	A-3	Q6550	F-6		
IC6491	C-2	Q6472	A-3	Q6551	D-4		
IC6501	A-4	Q6474	B-4	Q6552	C-4		
IC6502	A-4	Q6475	A-3	Q6553	B-4		
IC6510	D-5	Q6476	B-4	Q6554	C-4		
IC6511	C-5	Q6477	B-4	Q6555	B-4		
IC6512	D-4	Q6491	C-2	Q6556	B-4		
IC6521	D-4	Q6492	B-2	Q6581	B-2		
IC6541	D-4	Q6501	B-5	Q6582	C-4		
IC6542	B-4	Q6502	D-4	Q6601	F-3		
IC6581	B-2	Q6503	C-5	Q6602	F-3		
IC6601	E-3	Q6504	D-4	Q6603	D-2		
IC6602	C-3	Q6511	C-5	Q6604	D-2		
IC6603	G-4	Q6512	C-4	Q6605	D-2		
IC6604	G-4	Q6520	D-4	Q6606	E-3		
IC6605	E-3	Q6521	D-4	Q6611	E-2		
IC6606	E-3	Q6522	D-4	Q6612	E-2		
IC6607	D-3	Q6523	D-4	Q6613	E-3		
		Q6524	E-4	Q6614	E-3		
		Q6525	E-4	Q6621	C-3		
		Q6526	E-4	Q6624	C-3		
		Q6527	E-4	Q6641	F-5		
		Q6528	F-4	Q6642	F-4		
		Q6529	F-4	Q6671	G-4		
		Q6530	D-4	Q6672	F-4		
		Q6541	D-4	Q6673	G-4		

SS2-BOARD(COMPONENT SIDE)
TNPA2872


SS45
13
1
TNPA2872
ORDER NO.
SS2 ①
SS47
PbF

SS3-BOARD(COMPONENT SIDE)
TNPA2873

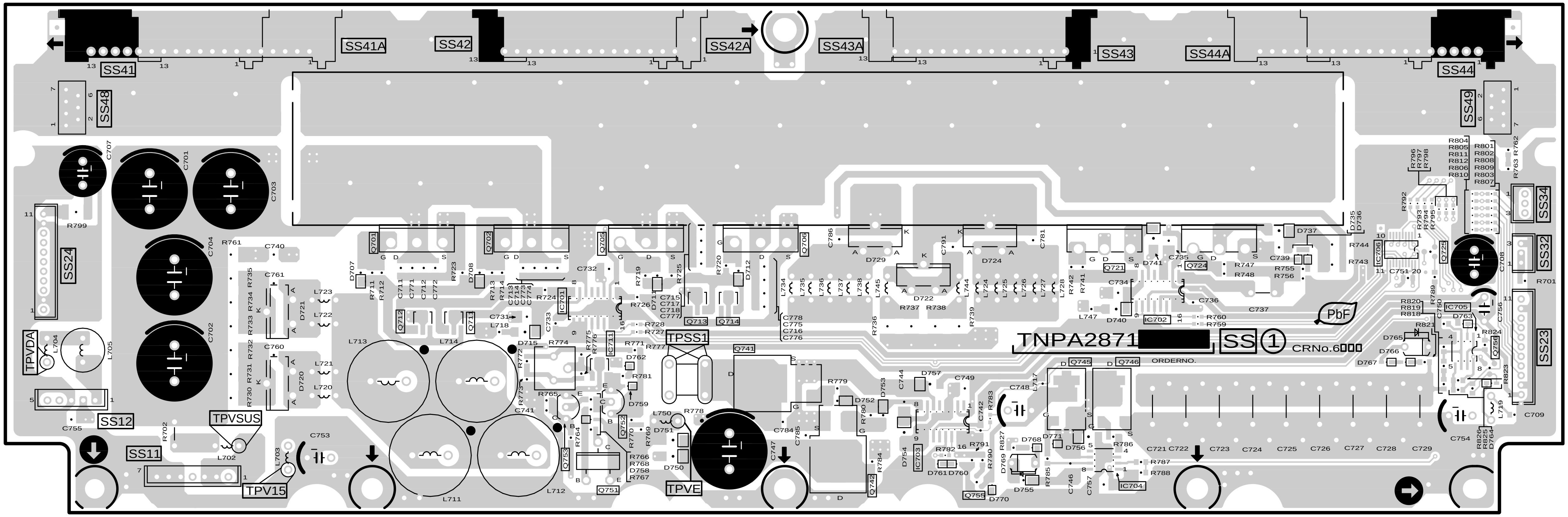

SS46
13
1
TNPA2873
ORDER NO.
SS3 ①
SS40
PbF



Parts Location

SS-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR		TP	
IC6701	D-2	Q6701	C-2	TPSS1	D-2
IC6702	G-2	Q6702	C-2	TPV15	B-1
IC6703	F-2	Q6705	D-2	TPVDA	A-2
IC6704	G-1	Q6706	E-2	TPVE	D-1
IC6705	H-2	Q6711	C-2	TPVSUS	B-1
IC6706	H-2	Q6712	C-2		
IC6711	D-2	Q6713	D-2		
		Q6714	E-2		
		Q6721	G-2		
		Q6724	G-2		
		Q6725	H-2		
		Q6741	E-2		
		Q6742	E-1		
		Q6745	F-2		
		Q6746	G-2		
		Q6751	D-1		
		Q6752	D-2		
		Q6753	D-2		
		Q6756	F-1		
		Q6756	I-2		

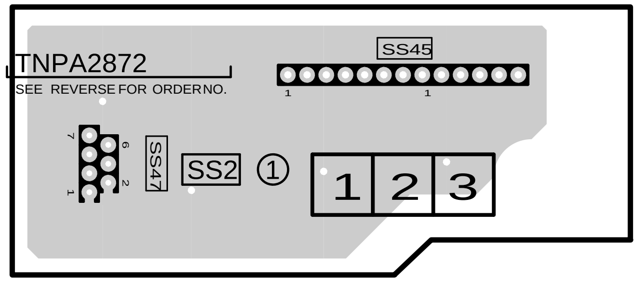
SS-BOARD(COMPONENT SIDE)
TXNSS10QBS


SS41
SS41A
SS42
SS42A
SS43A
SS43
SS44A
SS44
SS48
SS49
SS24
SS34
SS32
SS23
SS12
SS11
TPVDA
TPVSUS
TPV15
TPSS1
TPVE
TNPA2871
SS ①
CRNo.6
ORDERNO.
PbF
C701
C702
C703
C704
C707
C709
C708
C754
C755
C753
C747
L711
L712
L713
L714
L702
L703
L704
L705
L719
IC701
IC702
IC703
IC704
IC705
IC706
IC711
Q701
Q702
Q705
Q706
Q711
Q712
Q713
Q714
Q721
Q724
Q725
Q741
Q742
Q745
Q746
Q751
Q752
Q753
Q756
Q759
R701
R702
R799

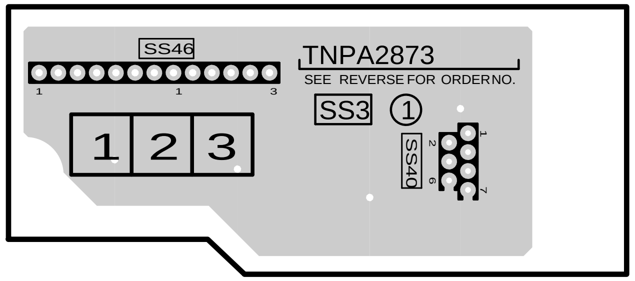
TH-42PA20U
SS-BOARD TXNSS10QBS
SS2-BOARD TNPA2872
SS3-BOARD TNPA2873

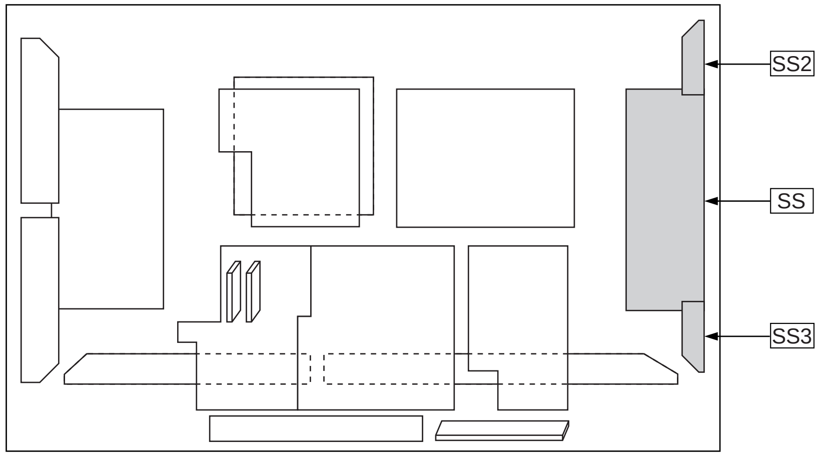
TH-42PA20U
SS-BOARD TXNSS10QBS
SS2-BOARD TNPA2872
SS3-BOARD TNPA2873

SS2-BOARD(FOIL SIDE)
TNPA2872


TNPA2872
SEE REVERSE FOR ORDER NO.
SS45
SS47
SS2
①
1 2 3

SS3-BOARD(FOIL SIDE)
TNPA2873

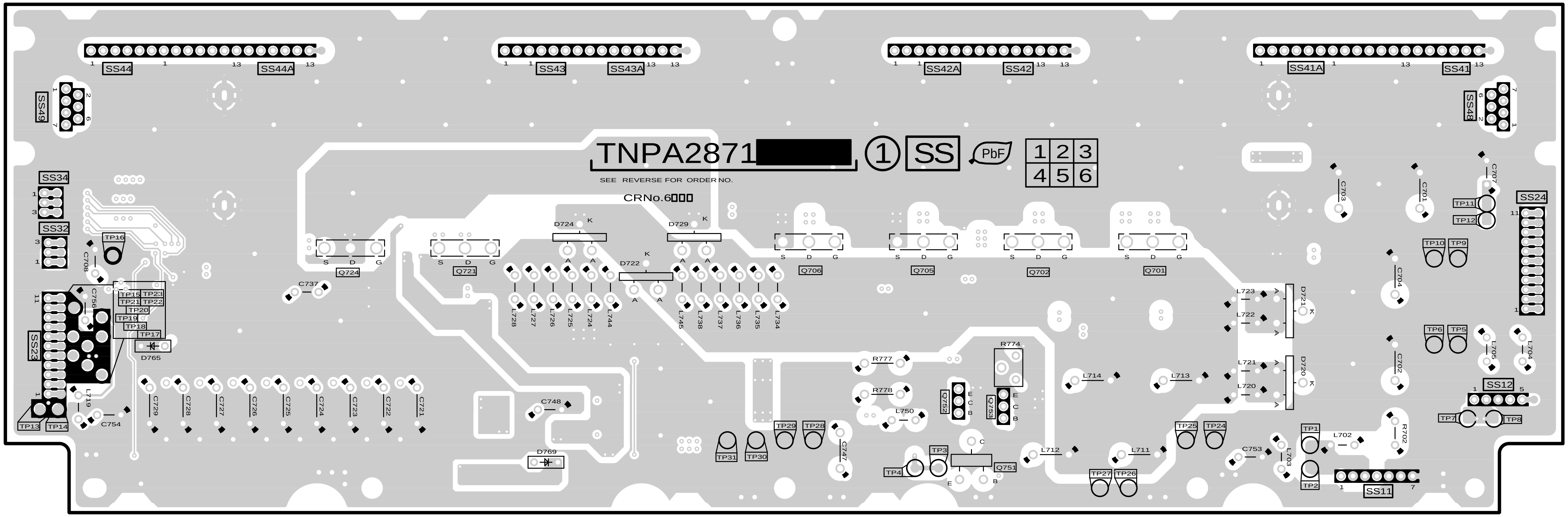

SS46
TNPA2873
SEE REVERSE FOR ORDER NO.
SS3
①
1 2 3
SS40



Parts Location

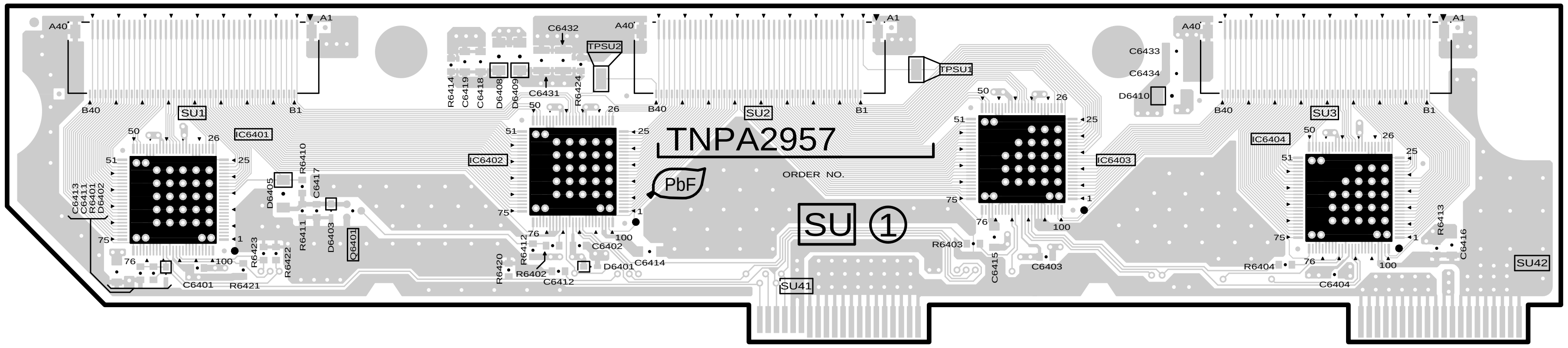
SS-BOARD (FOIL SIDE)					
TRANSISTOR		TP		TP23	A-2
Q6701	G-2	TP1	H-1	TP24	G-1
Q6702	F-2	TP10	H-2	TP25	G-1
Q6705	F-2	TP11	H-3	TP26	G-1
Q6706	E-2	TP12	H-3	TP27	G-1
Q6721	C-2	TP13	A-2	TP28	E-1
Q6724	C-2	TP14	A-2	TP29	E-1
Q6751	F-1	TP15	A-2	TP3	F-1
Q6752	F-2	TP16	A-2	TP30	E-1
Q6753	F-2	TP17	A-2	TP31	E-1
		TP18	A-2	TP4	F-1
		TP19	A-2	TP5	H-2
		TP2	H-1	TP6	H-2
		TP20	A-2	TP7	H-2
		TP21	A-2	TP8	I-2
		TP22	A-2	TP9	H-2

SS-BOARD(FOIL SIDE)
TXNSS10QBS

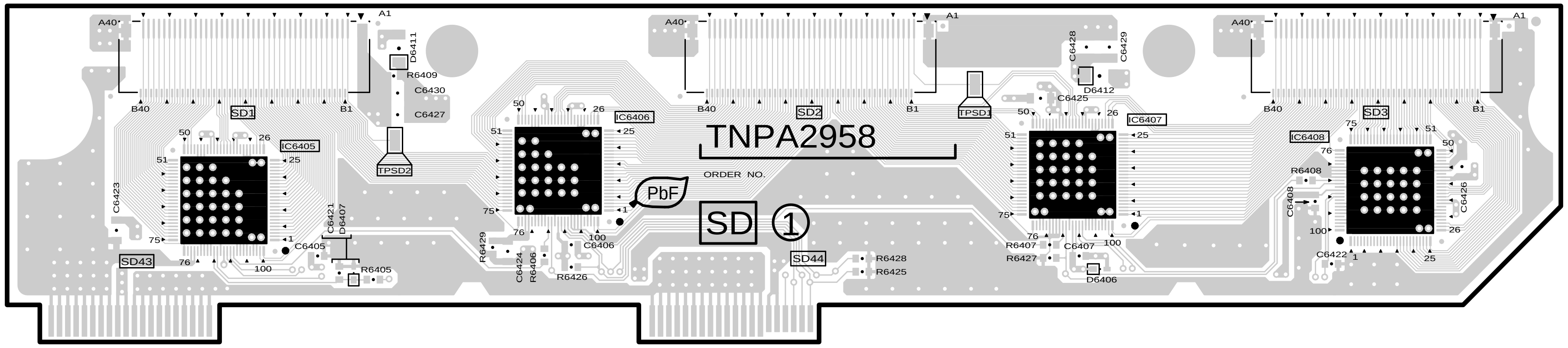

SS44
SS44A
SS43
SS43A
SS42A
SS42
SS41A
SS41
SS49
SS48
TNPA2871
①
SS
PbF
1 2 3
4 5 6
SEE REVERSE FOR ORDER NO.
CRNo.6
SS34
SS32
TP16
C708
SS23
C756
TP15
TP23
TP21
TP22
TP20
TP19
TP18
TP17
D765
L719
TP13
TP14
C754
C737
Q724
Q721
D724
D729
D722
L728
L727
L726
L725
L724
L744
L745
L738
L737
L736
L735
L734
C729
C728
C727
C726
C725
C724
C723
C722
C721
C748
D769
Q706
Q705
Q702
Q701
R777
R778
R774
L750
Q752
Q753
Q751
TP29
TP28
TP31
TP30
TP3
TP4
C747
L714
L713
L712
L711
TP27
TP26
TP25
TP24
L723
L722
L721
L720
D721
D720
C753
L703
TP1
TP2
L702
R702
C703
C701
C707
TP11
TP12
TP10
TP9
C704
TP6
TP5
L705
L704
C702
SS24
SS12
TP7
TP8
SS11

TH-42PA20U
SS-BOARD TXNSS10QBS
SS2-BOARD TNPA2872
SS3-BOARD TNPA2873

SU-BOARD
TNPA2957


A40
A1
B40
B1
SU1
SU2
SU3
SU41
SU42
IC6401
IC6402
IC6403
IC6404
TPSU1
TPSU2
TNPA2957
ORDER NO.
PbF
SU ①
C6401
C6402
C6403
C6404
C6411
C6412
C6413
C6414
C6415
C6416
C6417
C6418
C6419
C6431
C6432
C6433
C6434
D6401
D6402
D6403
D6405
D6408
D6409
D6410
Q6401
R6401
R6402
R6403
R6404
R6410
R6411
R6412
R6413
R6414
R6420
R6421
R6422
R6423
R6424
1
25
26
50
51
75
76
100

SD-BOARD
TNPA2958


A40
A1
B40
B1
SD1
SD2
SD3
SD43
SD44
IC6405
IC6406
IC6407
IC6408
TPSD1
TPSD2
TNPA2958
ORDER NO.
PbF
SD ①
C6405
C6406
C6407
C6421
C6422
C6423
C6424
C6425
C6426
C6427
C6428
C6429
C6430
D6406
D6407
D6411
D6412
R6405
R6406
R6407
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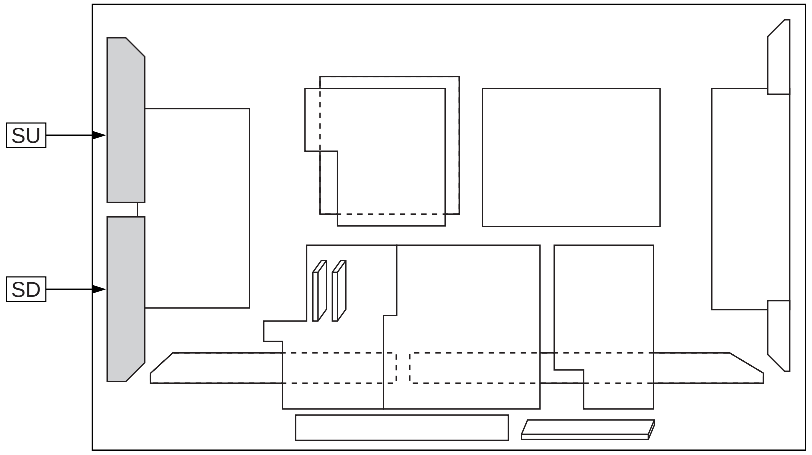
25
26
50
51
75
76
100



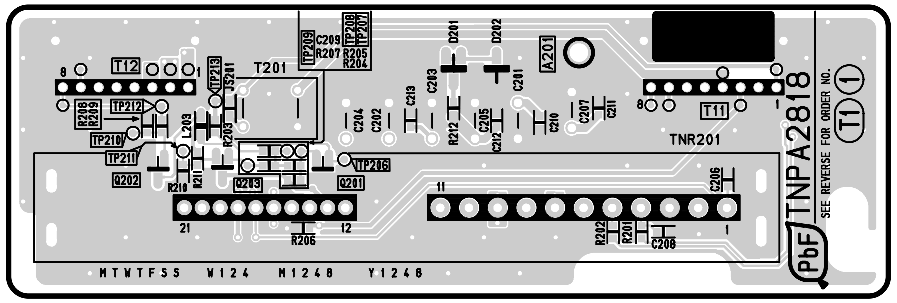
Parts Location

SU-BOARD			
IC		**TRANSISTOR**	
IC6401	B-5	Q6401	B-4
IC6402	C-5	**TP**	
IC6403	E-5	TPSU1	D-5
IC6404	F-5	TPSU2	C-5

Parts Location

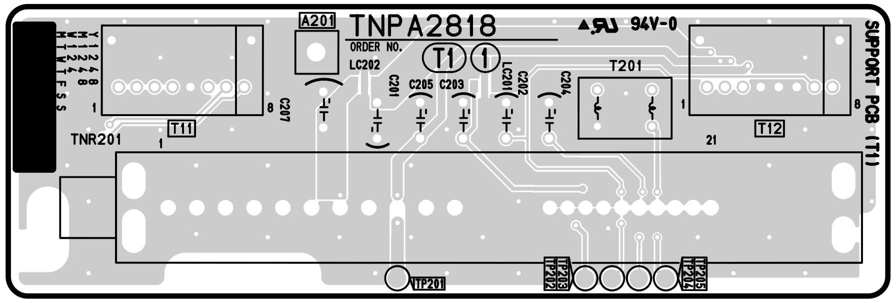
SD-BOARD			
IC		**TP**	
IC6405	B-2	TPSD1	D-2
IC6406	C-2	TPSD2	B-2
IC6407	E-2		
IC6408	F-2		

TA-BOARD(FOIL SIDE)
TNPA2818



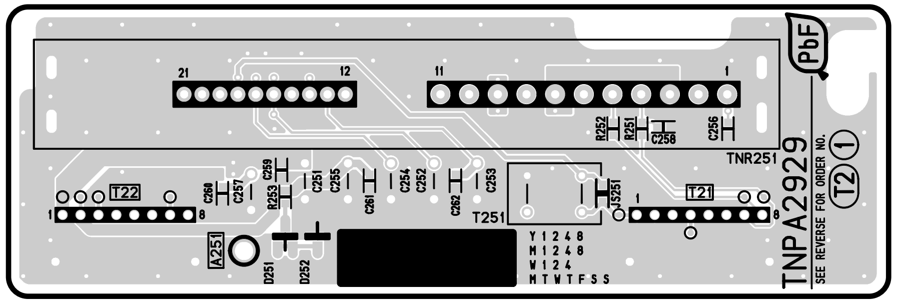
T12
T201
TP209
C209
R207
TP208
TP207
R205
R204
D201
D202
A201
TP213
JS201
R208
R209
TP212
TP210
TP211
L203
R203
C204
C202
C213
C203
R212
C205
C212
C201
C210
C207
C211
T11
TNR201
Q202
R210
R211
Q203
TP206
Q201
R206
R202
R201
C208
C206
TNPA2818
SEE REVERSE FOR ORDER NO.
T1
1
PbF
M T W T F S S
W 1 2 4
M 1 2 4 8
Y 1 2 4 8

TA-BOARD(COMPONENT SIDE)
TNPA2818



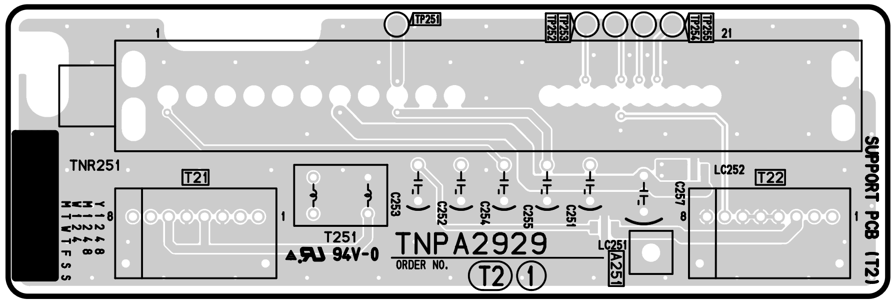
A201
TNPA2818
ORDER NO.
T1
1
94V-0
LC202
C201
C205
C203
LC201
C202
C204
C207
T201
T11
T12
TNR201
TP201
TP202
TP203
TP204
TP205
SUPPORT PCB (T1)

TB-BOARD(FOIL SIDE)
TNPA2929

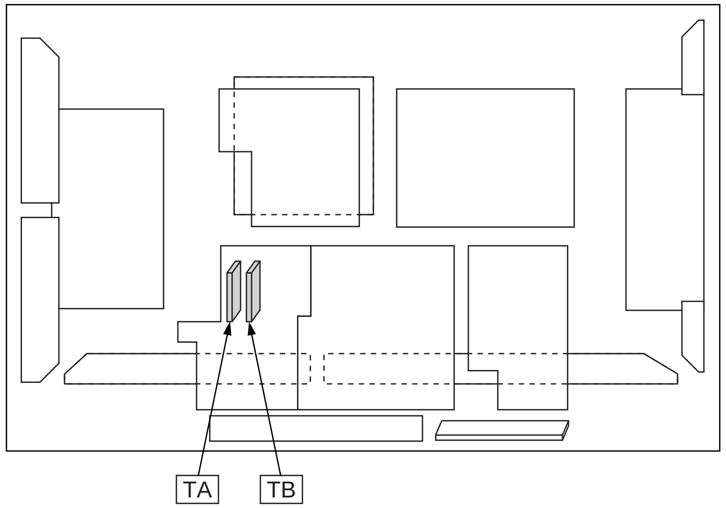


PbF
R252
R251
C258
C256
TNR251
T22
C260
C257
C259
R253
C251
C255
C261
C254
C252
C262
C253
T251
JS251
T21
A251
D251
D252
Y 1 2 4 8
M 1 2 4 8
W 1 2 4
M T W T F S S
TNPA2929
SEE REVERSE FOR ORDER NO.
T2
1

TB-BOARD(COMPONENT SIDE)
TNPA2929



TP251
TP252
TP253
TP254
TP255
TNR251
T21
T251
C253
C252
C254
C255
C251
LC252
C257
T22
94V-0
TNPA2929
ORDER NO.
T2
1
LC251
A251
SUPPORT PCB (T2)



Parts Location

TA-BOARD (FOIL SIDE)			
TRANSISTOR		TP	
Q201	B-5	TP206	B-5
Q202	A-5	TP207	B-5
Q203	B-5	TP208	B-5
		TP209	B-5
		TP210	A-5
		TP211	A-5
		TP212	A-5
		TP213	A-5

Parts Location

TA-BOARD (COMPONENT SIDE)			
TRANSISTOR			
TP201	E-4		
TP202	F-4		
TP203	F-4		
TP204	F-4		
TP205	F-4		

Parts Location

TB-BOARD (COMPONENT SIDE)			
TRANSISTOR			
TP251	E-3		
TP252	F-3		
TP253	F-3		
TP254	F-3		
TP255	F-3		

6
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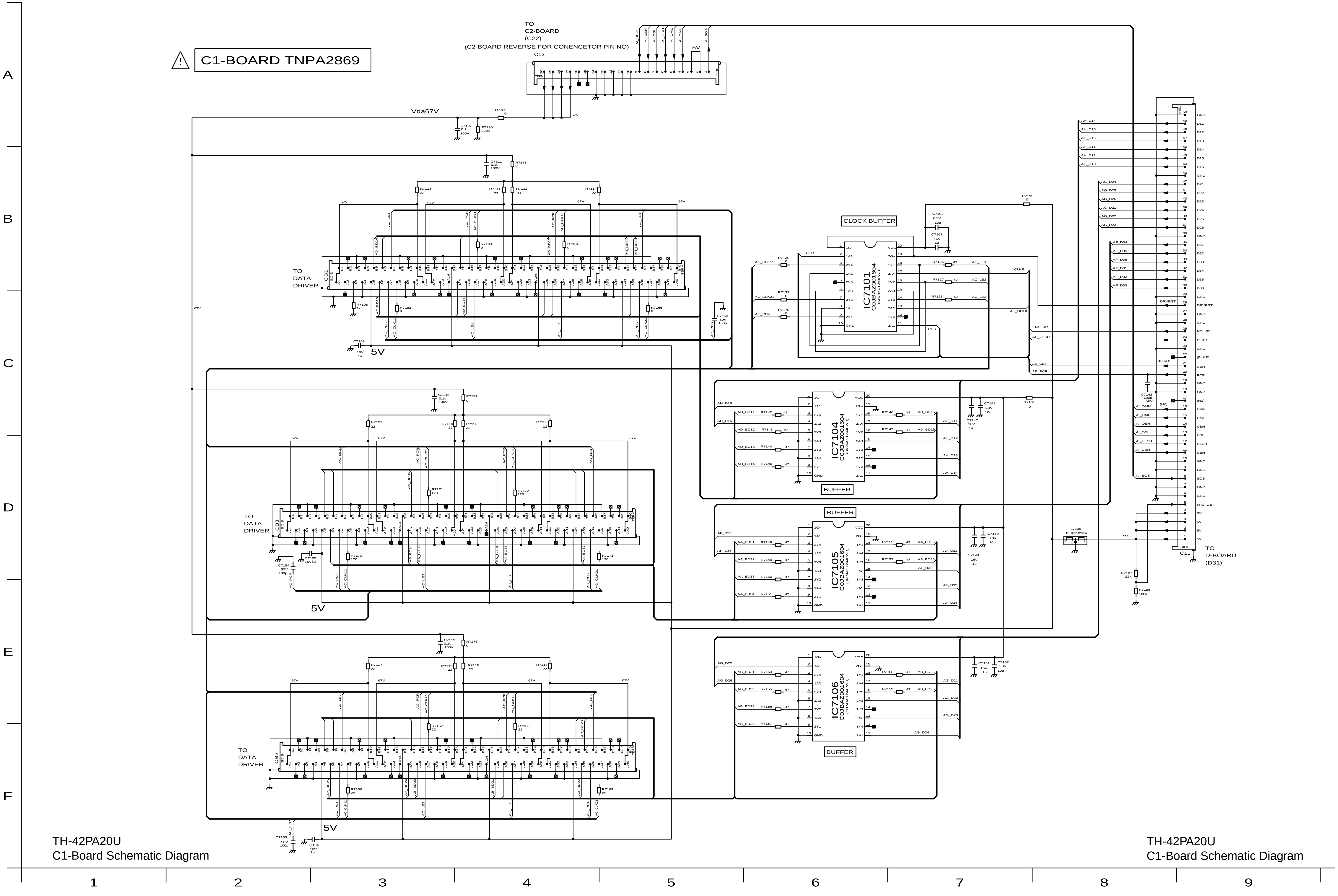
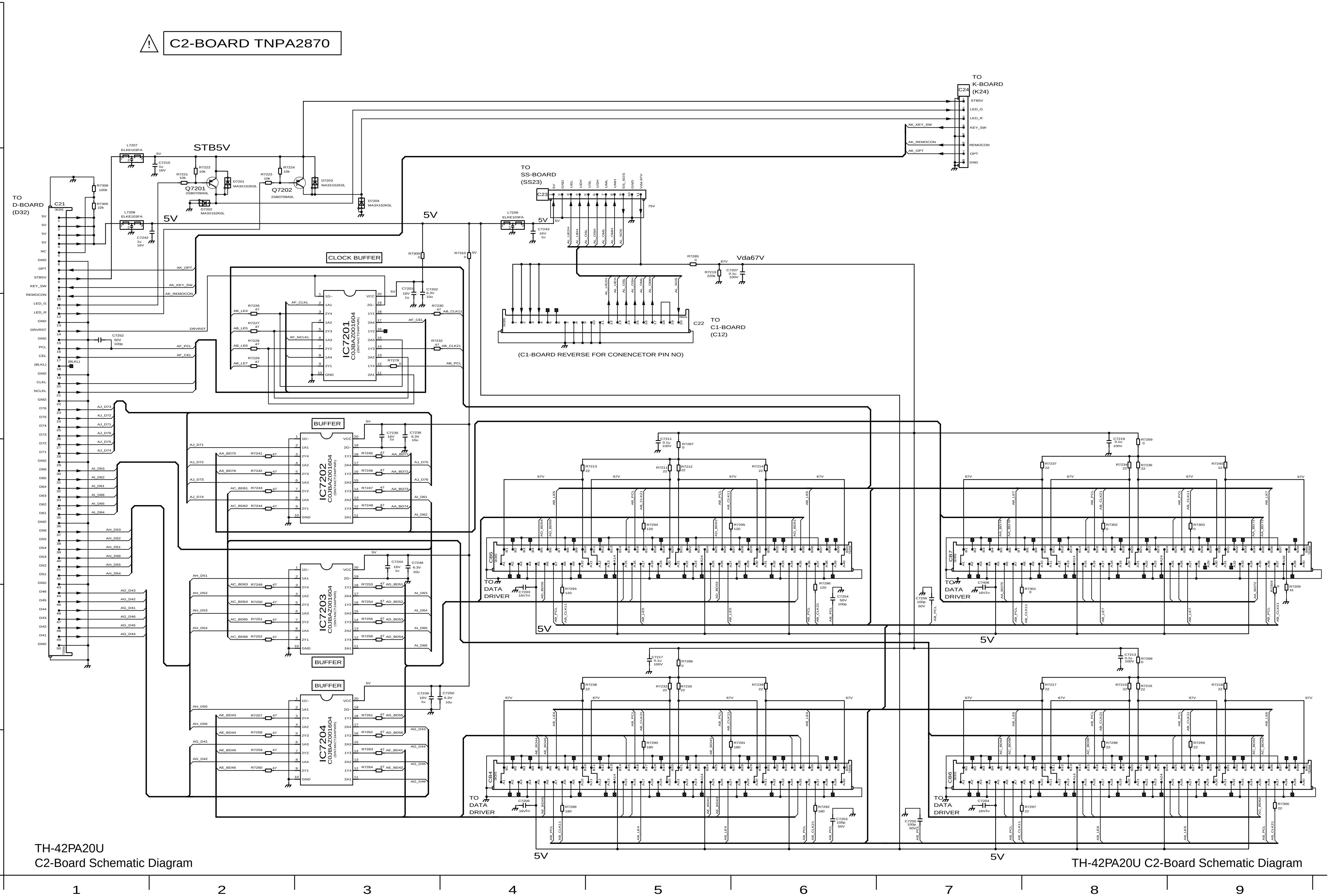
A B C D E F G H I

⚠ C1-BOARD TNPA2869


TO
C2-BOARD
(C22)
(C2-BOARD REVERSE FOR CONENECTOR PIN NO)
C12
5V
Vda67V
67V
R7189
C7107
R7190
C7111
R7175
TO
DATA
DRIVER
CB1
CB3
CB2
5V
CLOCK BUFFER
IC7101
C0JBAZ001604
(SN74ACT244PWR)
IC7104
C0JBAZ001604
BUFFER
IC7105
C0JBAZ001604
BUFFER
IC7106
C0JBAZ001604
BUFFER
L7106
ELKE103FA
C11
TO
D-BOARD
(D31)
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

TH-42PA20U
C1-Board Schematic Diagram

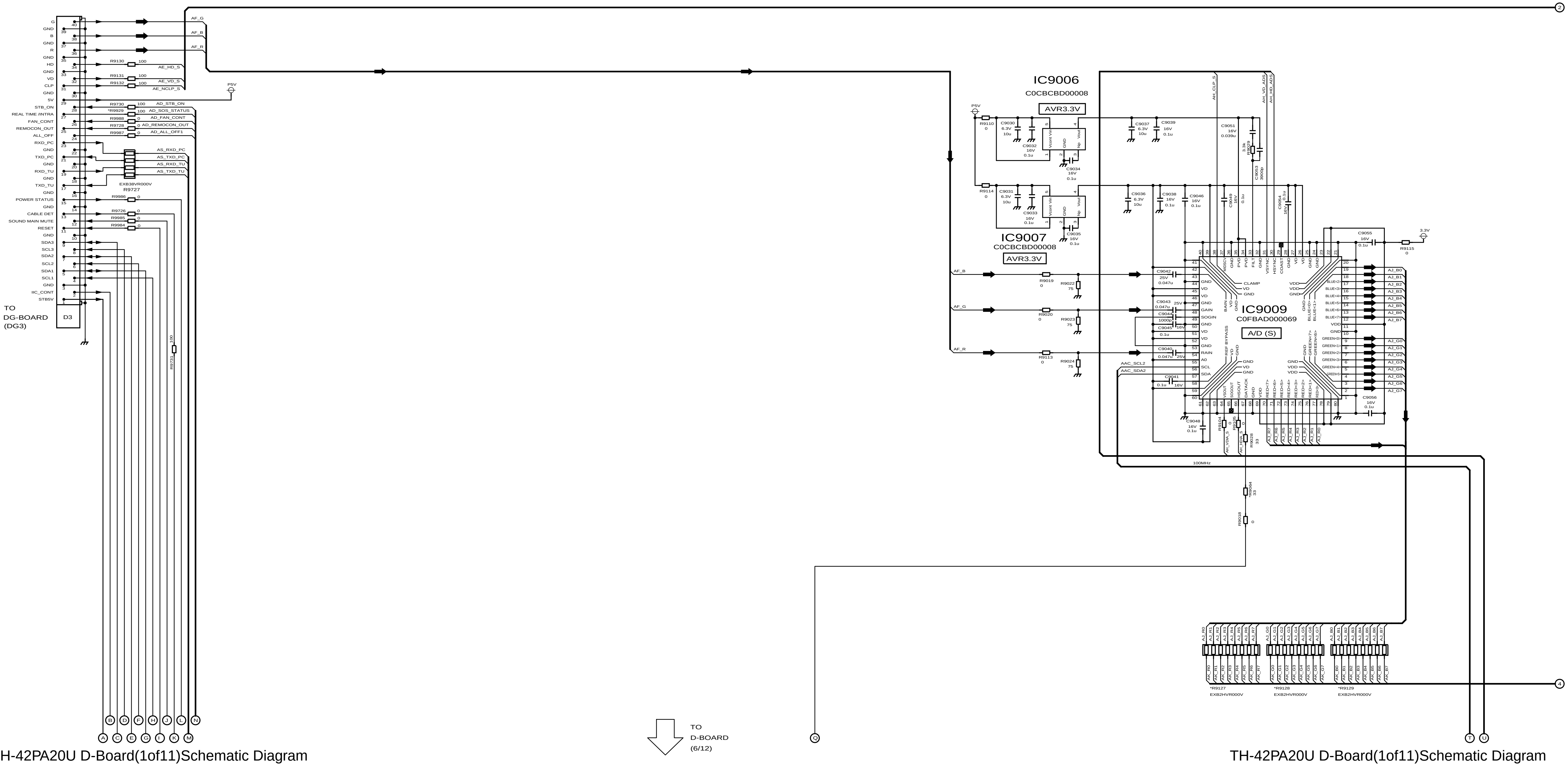
TH-42PA20U
C1-Board Schematic Diagram


C2-BOARD TNPA2870
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
TO D-BOARD (D32)
C21
TO K-BOARD (K24)
C24
STB5V
LED_G
LED_R
KEY_SW
REMOCON
OPT
GND
AK_KEY_SW
AK_REMOCON
AK_OPT
L7207 ELKE103FA
L7208 ELKE103FA
L7209 ELKE103FA
STB5V
5V
Q7201 2SB0709A0L
Q7202 2SB0709A0L
D7201 MA3X152K0L
D7202 MA3X152K0L
D7203 MA3X152K0L
D7204 MA3X152K0L
R7221 10k
R7222 10k
R7223 10k
R7224 10k
R7306 100k
R7305 22k
C7210 1u 16V
C7242 1u 16V
C7243 16V 1u
TO SS-BOARD (SS23)
C23
Vda 67V
75V
CLOCK BUFFER
IC7201 C0JBAZ001604
R7226 47
R7227 47
R7228 47
R7229 47
R7230 47
R7232 47
R7278 0
R7309 0
R7310 0
C7201 16V 1u
C7202 6.3V 10u
C7252 50V 100p
AF_CLKL
AF_NCLKL
AF_CEL
AF_PCL
AF_CEL
DRVRST
AB_LE4
AB_LE5
AB_LE6
AB_LE7
AB_CLK11
AB_CLK21
AB_PCL
R7285 0
R7219 220k
C7207 0.1u 100V
Vda67V
TO C1-BOARD (C12)
C22
(C1-BOARD REVERSE FOR CONENECTOR PIN NO)
BUFFER
IC7202 C0JBAZ001604
IC7203 C0JBAZ001604
IC7204 C0JBAZ001604
C7235 16V 1u
C7236 6.3V 10u
C7244 16V 1u
C7246 6.3V 10u
C7239 16V 1u
C7250 6.3V 10u
CB5
CB7
CB4
CB6
TO DATA DRIVER
TO DATA DRIVER
TO DATA DRIVER
TO DATA DRIVER
5V
5V
5V
5V
67V
R7293 120
R7294 120
R7295 120
R7296 120
R7301 0
R7302 0
R7303 0
R7304 0
R7205 1k
R7289 180
R7290 180
R7291 180
R7292 180
R7297 22
R7298 22
R7299 22
R7300 22
C7254 50V 100p
C7256 100p 50V
C7253 100p 50V
C7255 100p 50V
C7203 16V 1u
C7406 16V 1u
C7206 16V 1u
C7204 16V 1u
C7211 0.1u 100V
C7219 0.1u 100V
C7217 0.1u 100V
C7213 0.1u 100V
R7287 0
R7269 0
R7286 0
R7268 0

TH-42PA20U
C2-Board Schematic Diagram

TH-42PA20U C2-Board Schematic Diagram

⚠ D-BOARD TXN/D10QCS (1/11)

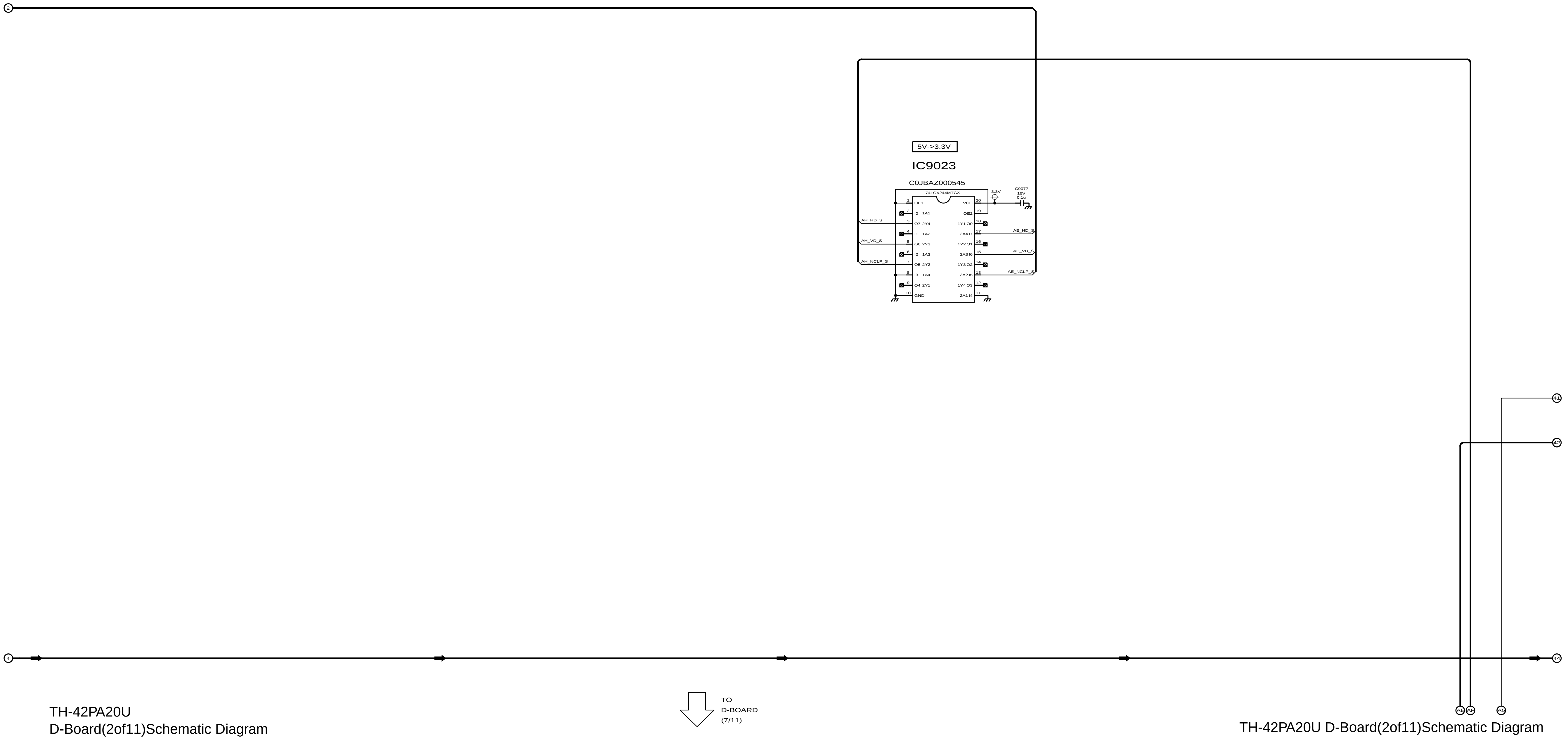


TO
DG-BOARD
(DG3)
D3
G
GND
B
R
HD
VD
CLP
5V
STB_ON
REAL TIME /INTRA
FAN_CONT
REMOCON_OUT
ALL_OFF
RXD_PC
TXD_PC
RXD_TU
TXD_TU
POWER STATUS
CABLE DET
SOUND MAIN MUTE
RESET
SDA3
SCL3
SDA2
SCL2
SDA1
SCL1
IIC_CONT
STB5V
AF_G
AF_B
AF_R
AE_HD_S
AE_VD_S
AE_NCLP_S
P5V
AD_STB_ON
AD_SOS_STATUS
AD_FAN_CONT
AD_REMOCON_OUT
AD_ALL_OFF1
AS_RXD_PC
AS_TXD_PC
AS_RXD_TU
AS_TXD_TU
EXB38VR000V
R9727
IC9006
C0CBCBD00008
AVR3.3V
IC9007
C0CBCBD00008
AVR3.3V
IC9009
C0FBAD000069
A/D (S)
AAC_SCL2
AAC_SDA2
100MHz
3.3V
*R9127
EXB2HVR000V
*R9128
EXB2HVR000V
*R9129
EXB2HVR000V
TO
D-BOARD
(6/12)
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

TH-42PA20U D-Board(1of11)Schematic Diagram

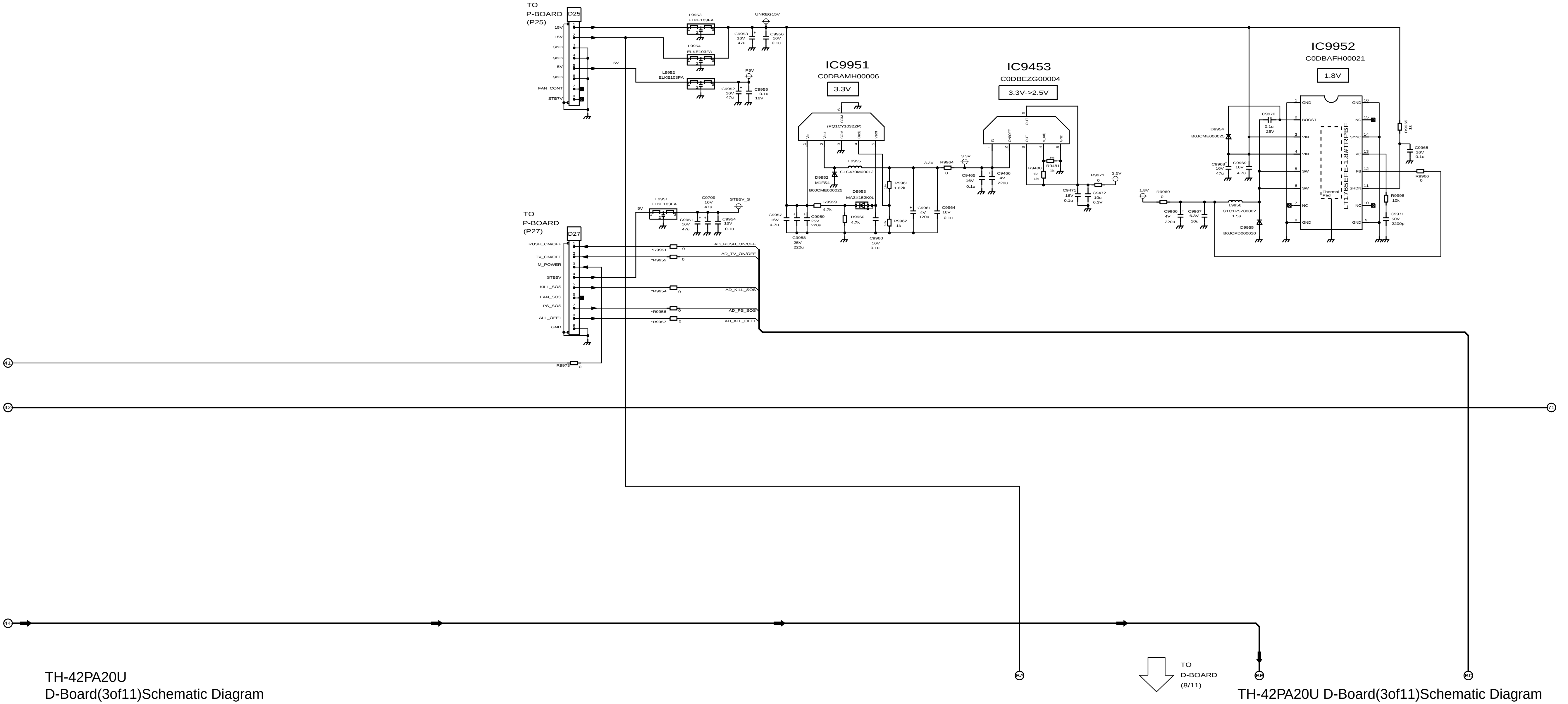
TH-42PA20U D-Board(1of11)Schematic Diagram

⚠ D-BOARD TXN/D10QCS (2/11)



②
5V->3.3V
IC9023
C0JBAZ000545
74LCX244MTCX
3.3V
C9077
16V
0.1u
1 OE1
2 I0 1A1
3 O7 2Y4
4 I1 1A2
5 O6 2Y3
6 I2 1A3
7 O5 2Y2
8 I3 1A4
9 O4 2Y1
10 GND
20 VCC
19 OE2
18 1Y1 O0
17 2A4 I7
16 1Y2 O1
15 2A3 I6
14 1Y3 O2
13 2A2 I5
12 1Y4 O3
11 2A1 I4
AH_HD_S
AH_VD_S
AH_NCLP_S
AE_HD_S
AE_VD_S
AE_NCLP_S
41
42
④
44
TO
D-BOARD
(7/11)
AE
AF
AG

⚠ D-BOARD TXN/D10QCS (3/11)

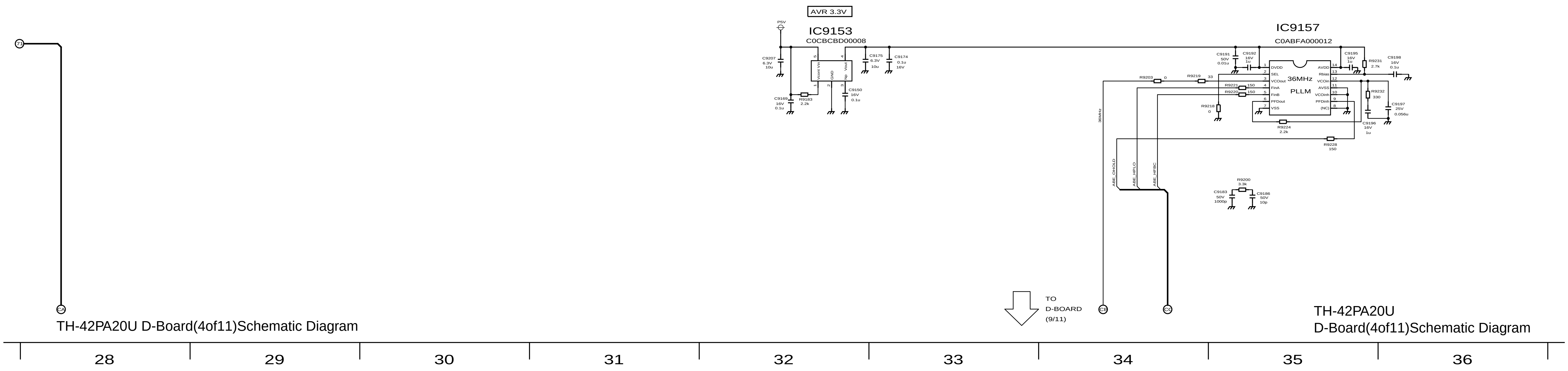

TO
P-BOARD
(P25)
D25
15V
15V
GND
GND
5V
GND
FAN_CONT
STB7V
5V
L9953
ELKE103FA
L9954
ELKE103FA
L9952
ELKE103FA
UNREG15V
C9953
16V
47u
C9956
16V
0.1u
P5V
C9952
16V
47u
C9955
0.1u
16V
IC9951
C0DBAMH00006
3.3V
(PQ1CY1032ZP)
Vin
Vout
COM
Oadj
Vsoft
L9955
G1C470M00012
D9952
M1FS4
B0JCME000025
D9953
MA3X152K0L
R9959
4.7k
R9960
4.7k
R9961
1.62k
R9962
1k
1%
C9957
16V
4.7u
C9958
25V
220u
C9959
25V
220u
C9960
16V
0.1u
C9961
4V
120u
C9964
16V
0.1u
3.3V
R9964
0
3.3V
C9465
16V
0.1u
C9466
4V
220u
IC9453
C0DBEZG00004
3.3V->2.5V
IN
ON/OFF
OUT
V_adj
GND
R9480
1k
R9481
1k
R9971
0
2.5V
C9471
16V
0.1u
C9472
10u
6.3V
IC9952
C0DBAFH00021
1.8V
LT1765EFE-1.8#TRPBF
GND
BOOST
VIN
VIN
SW
SW
NC
GND
GND
NC
SYNC
VC
FB
SHDN
NC
GND
Thermal Pad
C9970
0.1u
25V
D9954
B0JCME000025
C9968
16V
47u
C9969
16V
4.7u
R9965
1k
C9965
16V
0.1u
R9966
0
R9998
10k
C9971
50V
2200p
1.8V
R9969
0
C9966
4V
220u
C9967
6.3V
10u
L9956
G1C1R5Z00002
1.5u
D9955
B0JCPD000010
TO
P-BOARD
(P27)
D27
RUSH_ON/OFF
TV_ON/OFF
M_POWER
STB5V
KILL_SOS
FAN_SOS
PS_SOS
ALL_OFF1
GND
5V
L9951
ELKE103FA
C9709
16V
47u
STB5V_S
C9951
16V
47u
C9954
16V
0.1u
*R9951 0
*R9952 0
*R9954 0
*R9956 0
*R9957 0
AD_RUSH_ON/OFF
AD_TV_ON/OFF
AD_KILL_SOS
AD_PS_SOS
AD_ALL_OFF1
R9973 0
41
42
44
71
BA
BB
BD
TO
D-BOARD
(8/11)

TH-42PA20U
D-Board(3of11)Schematic Diagram

TH-42PA20U D-Board(3of11)Schematic Diagram

19 20 21 22 23 24 25 26 27

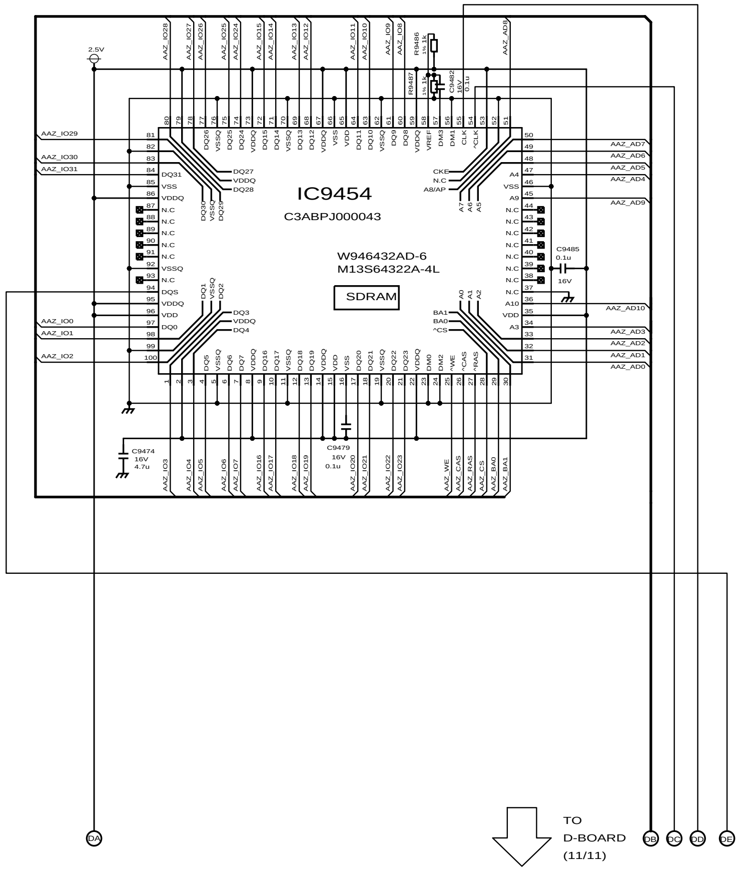
D-BOARD TXN/D10QCS (4/11)


AVR 3.3V
P5V
IC9153
C0CBCBD00008
Vcont Vin
GND
Vout
Np
1
2
3
4
5
C9207
6.3V
10u
C9169
16V
0.1u
R9183
2.2k
C9150
16V
0.1u
C9175
6.3V
10u
C9174
0.1u
16V
IC9157
C0ABFA000012
36MHz
PLLM
DVDD
SEL
VCOout
FinA
FinB
PFDout
VSS
AVDD
Rbias
VCOin
AVSS
VCOinh
PFDinh
(NC)
6
7
8
9
10
11
12
13
14
C9191
50V
0.01u
C9192
16V
1u
C9195
16V
1u
R9231
2.7k
C9198
16V
0.1u
R9203
0
R9219
33
R9221
150
R9220
150
R9218
0
R9232
330
C9197
25V
0.056u
C9196
16V
1u
R9224
2.2k
R9228
150
36MHz
ABE_OHOLD
ABE_HPLO
ABE_HFBC
R9200
3.3k
C9183
50V
1000p
C9186
50V
10p
71
CA
CB
CC
TO
D-BOARD
(9/11)
28
29
30
31
32
33
34
35
36

TH-42PA20U D-Board(4of11)Schematic Diagram

TH-42PA20U
D-Board(4of11)Schematic Diagram

⚠ D-BOARD TXN/D10QCS (5/11)

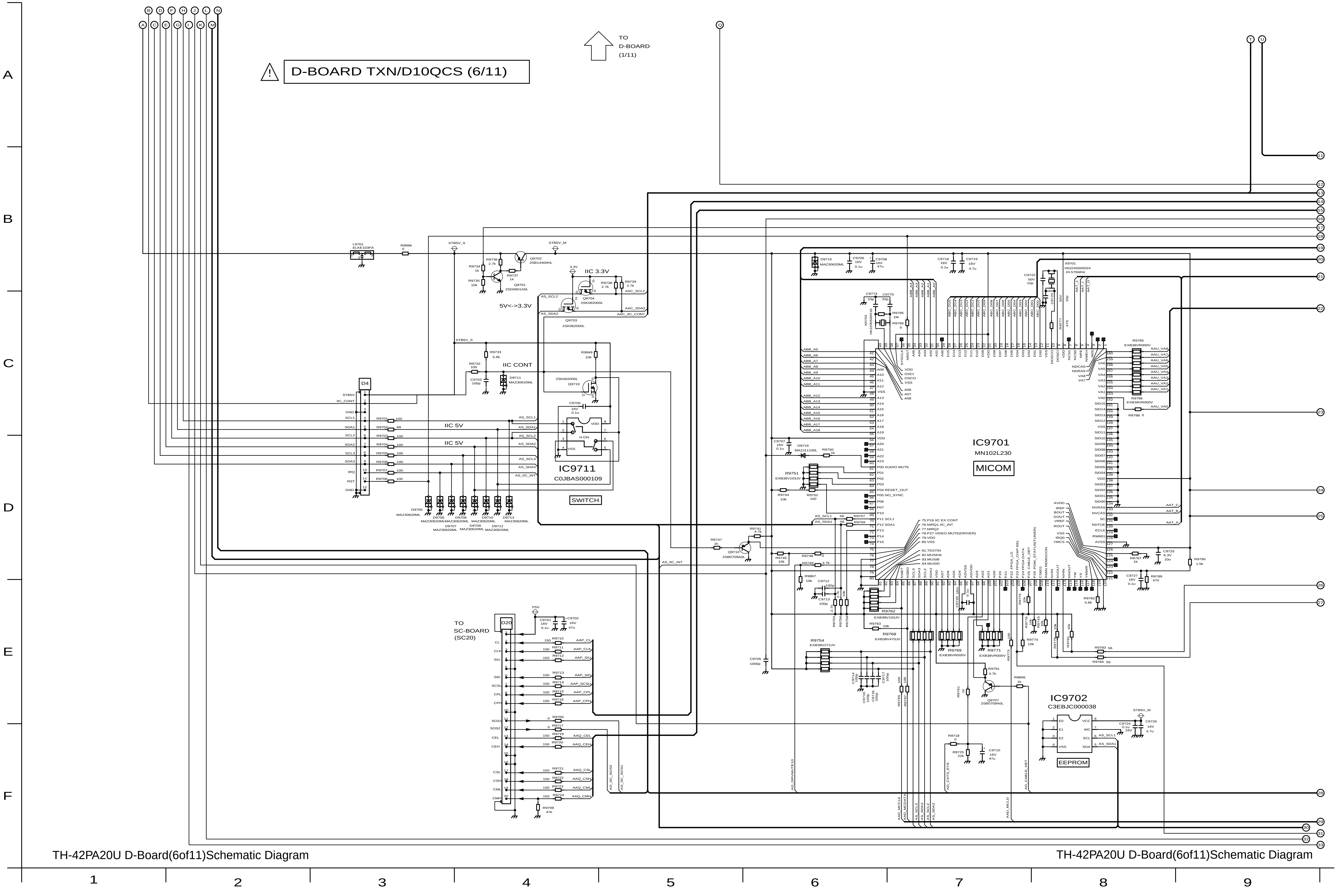

IC9454
C3ABPJ000043
W946432AD-6
M13S64322A-4L
SDRAM
2.5V
R9486 1% 1k
R9487 1% 1k
C9482 16V 0.1u
C9485 0.1u 16V
C9474 16V 4.7u
C9479 16V 0.1u
AAZ_IO28
AAZ_IO27
AAZ_IO26
AAZ_IO25
AAZ_IO24
AAZ_IO15
AAZ_IO14
AAZ_IO13
AAZ_IO12
AAZ_IO11
AAZ_IO10
AAZ_IO9
AAZ_IO8
AAZ_AD8
AAZ_IO29
AAZ_IO30
AAZ_IO31
AAZ_IO0
AAZ_IO1
AAZ_IO2
AAZ_AD7
AAZ_AD6
AAZ_AD5
AAZ_AD4
AAZ_AD9
AAZ_AD10
AAZ_AD3
AAZ_AD2
AAZ_AD1
AAZ_AD0
AAZ_IO3
AAZ_IO4
AAZ_IO5
AAZ_IO6
AAZ_IO7
AAZ_IO16
AAZ_IO17
AAZ_IO18
AAZ_IO19
AAZ_IO20
AAZ_IO21
AAZ_IO22
AAZ_IO23
AAZ_WE
AAZ_CAS
AAZ_RAS
AAZ_CS
AAZ_BA0
AAZ_BA1
DQ26
VSSQ
DQ25
DQ24
VDDQ
DQ15
DQ14
DQ13
DQ12
VSS
VDD
DQ11
DQ10
DQ9
DQ8
VREF
DM3
DM1
CLK
^CLK
DQ27
DQ28
DQ31
DQ30
DQ29
N.C
DQS
DQ0
DQ1
DQ2
DQ3
DQ4
CKE
A8/AP
A7
A6
A5
A4
A9
A10
A3
A0
A1
A2
BA1
BA0
^CS
DQ5
DQ6
DQ7
DQ16
DQ17
DQ18
DQ19
DQ20
DQ21
DQ22
DQ23
DM0
DM2
^WE
^CAS
^RAS
DA
DB
DC
DD
DE
TO
D-BOARD
(11/11)

TH-42PA20U
D-Board(5of11)Schematic Diagram

TH-42PA20U
D-Board(5of11)Schematic Diagram

46 47 48 49 50 51 52 53 54

D-BOARD TXN/D10QCS (6/11)



A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
TO
D-BOARD
(1/11)
L9701
ELKE103FA
R9996
0
STB5V_S
STB5V_M
Q9702
2SB1440OHL
Q9701
2SD0601A0L
R9734
1k
R9735
10k
R9736
2.7k
R9737
1k
3.3V
IIC 3.3V
R9738
2.7k
R9739
2.7k
AAC_SCL2
AAC_SDA2
AAC_IIC_CONT
AS_SCL2
AS_SDA2
Q9704
2SK062000L
Q9703
2SK062000L
5V<->3.3V
R9733
5.6k
R9732
100
C9703
100p
IIC CONT
D9711
MAZ30620ML
R9949
10k
2SK062000L
Q9719
C9700
16V
0.1u
D4
STB5V
IIC_CONT
GND
SCL1
SDA1
SCL2
SDA2
SCL3
SDA3
IRQ
RST
GND
R9701
R9702
R9703
R9704
R9705
R9706
R9707
R9708
100
68
IIC 5V
IIC 5V
AS_SCL1
AS_SDA1
AS_SCL2
AS_SDA2
AS_SCL3
AS_SDA3
AS_IIC_INT
VDD
H.ON
VSS
IC9711
C0JBAS000109
SWITCH
D9705
MAZ30620ML
D9706
D9707
D9708
D9709
D9710
D9712
D9713
MAZ30620ML
D9715
MAZ30620ML
C9706
16V
0.1u
C9708
16V
47u
C9718
16V
0.1u
C9719
16V
4.7u
C9722
50V
10p
X9701
H0J245500024
24.576MHz
C9774
33p
C9775
33p
R9795
1M
R9766
0
X9703
H0J200500016
R9785
EXB38VR000V
R9786
EXB38VR000V
R9788
0
AAU_VA8
AAU_VA7
AAU_VA6
AAU_VA5
AAU_VA4
AAU_VA3
AAU_VA2
AAU_VA1
AAU_VA0
ABB_A5
ABB_A6
ABB_A7
ABB_A8
ABB_A9
ABB_A10
ABB_A11
ABB_A12
ABB_A13
ABB_A14
ABB_A15
ABB_A16
ABB_A17
ABB_A18
ABB_A0
ABB_A1
ABB_A2
ABB_A3
ABB_A4
ABC_D0
ABC_D1
ABC_D2
ABC_D3
ABC_D4
ABC_D5
ABC_D6
ABC_D7
ABC_D8
ABC_D9
ABC_D10
ABC_D11
ABC_D12
ABC_D13
ABC_D14
ABC_D15
AAT_J
AAT_I
AAT_D
AAT_C
AAT_B
AAT_A
IC9701
MN102L230
MICOM
C9707
16V
0.1u
D9716
MA2J11100L
R9750
1k
R9751
EXB38V103JV
R9744
10k
R9752
100
P00 AUDIO MUTE
P04 RESET_OUT
P05 NO_SYNC
P11 SCL1
P12 SDA1
75.P16 IIC EX CONT
76.NIRQ1 IIC_INT
77.NIRQ2
78.P27 VIDEO MUTE(DRIVER)
79.VDD
80.VSS
81.TESTIN
82.MUSIKK
83.MUSIB
84.MUSID
R9757
56
R9759
56
R9741
4.7k
R9747
1k
Q9710
2SB0709A0L
R9745
10k
R9748
0
R9749
4.7k
R9867
10k
C9712
100p
C9713
100p
R9762
EXB38V103JV
R9763
10k
R9768
EXB38V470JV
R9754
EXB38V2722V
C9705
1000p
R9769
EXB38VR000V
R9771
EXB38VR000V
R9791
4.7k
Q9707
2SB0709A0L
R9806
1k
R9787
1k
C9725
6.3V
10u
R9790
1.5k
C9727
16V
0.1u
R9789
470
R9782
5.6k
R9783
56
R9784
56
R9774
10k
P22 FPGA_LD
P23 FPGA_CHIP_SEL
P24 FPGA_DATA
P25 CABLE_DET
P26 POW_STATUS(TUNER)
P27 RMIN REMOCON
IC9702
C3EBJC000038
E0
E1
E2
VSS
VCC
WC
SCL
SDA
EEPROM
C9724
0.1u
16V
C9726
16V
4.7u
R9718
0
R9725
22k
C9710
16V
47u
TO
SC-BOARD
(SC20)
D20
P5V
C9701
16V
0.1u
C9702
16V
47u
CL
CLK
SIU
SID
SCSU
CPL
CPH
SOS1
SOS2
CEL
CEH
CSL
CSH
CML
CMH
R9710
R9711
R9712
R9713
R9714
R9715
R9716
R9700
R9717
R9719
R9720
R9721
R9722
R9723
R9724
150
AAP_CL
AAP_CLK
AAP_SIU
AAP_SID
AAP_SCSU
AAP_CPL
AAP_CPH
AAQ_CEL
AAQ_CEH
AAQ_CSL
AAQ_CSH
AAQ_CML
AAQ_CMH
R9709
47k
AD_SC_SOS2
AD_SC_SOS1
AS_IIC_INT
AD_DRVMUTE10
AAD_MCCLK
AAD_MCDATA
AS_SCL3
AS_SDA3
AS_SCL2
AS_SDA2
AD_CATS_EYE
AAD_MCLD
AD_CABLE_DET
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
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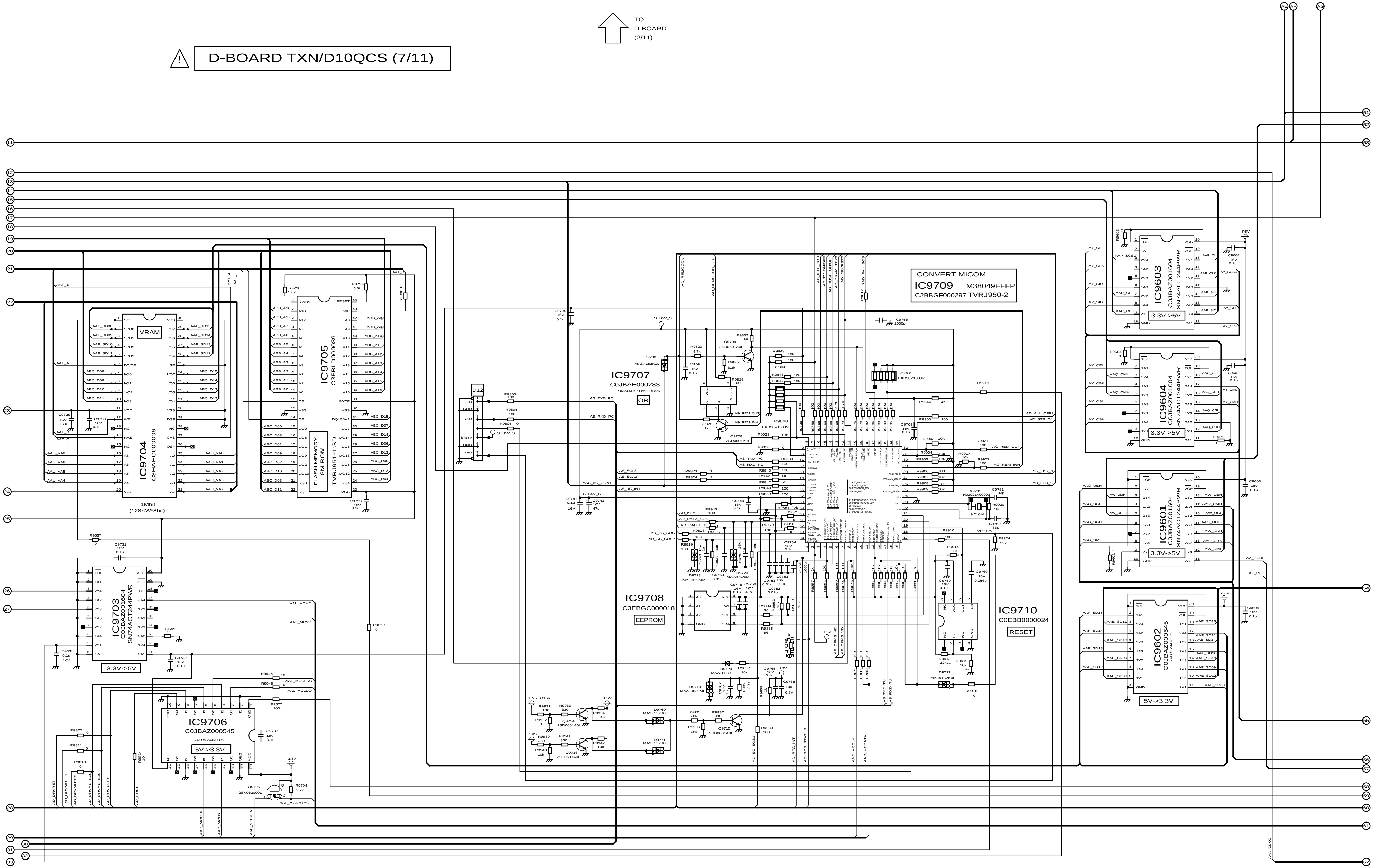
TH-42PA20U D-Board(6of11)Schematic Diagram

TH-42PA20U D-Board(6of11)Schematic Diagram

D-BOARD TXN/D10QCS (7/11)

TO
D-BOARD
(2/11)



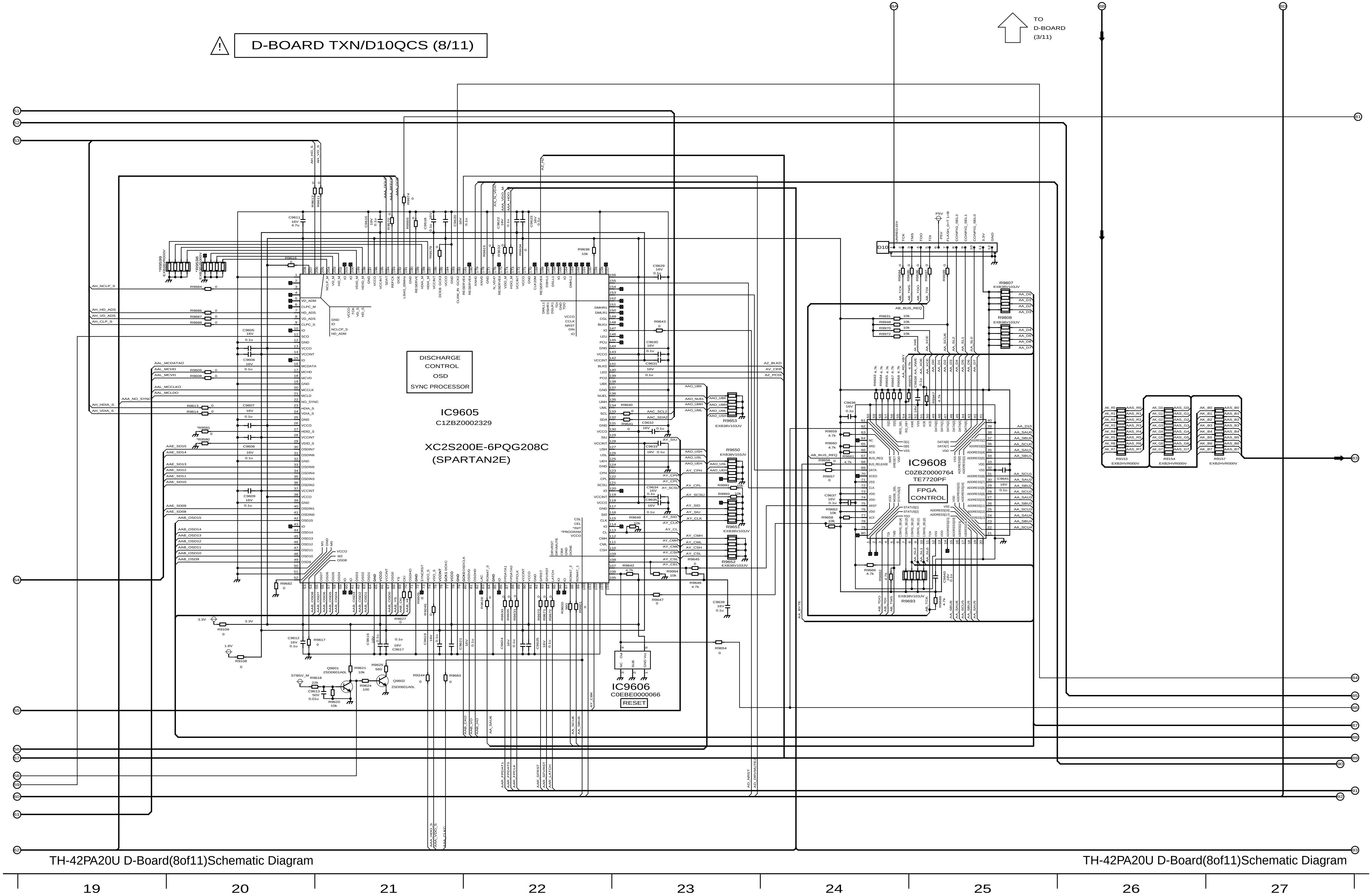
IC9704
C3HAHC000006
VRAM
1Mbit
(128KW*8bit)
IC9705
C3FBLD000039
FLASH MEMORY
8M ROM
TVRJ951-1:SD
IC9703
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9706
C0JBAZ000545
74LCX244MTCX
5V->3.3V
IC9707
C0JBAE000283
SN74AHC1G32HDBVR
OR
IC9708
C3EBGC000018
EEPROM
CONVERT MICOM
IC9709
M38049FFFP
C2BBGF000297 TVRJ950-2
IC9710
C0EBB0000024
RESET
IC9603
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9604
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9601
C0JBAZ001604
SN74ACT244PWR
3.3V->5V
IC9602
C0JBAZ000545
5V->3.3V
D12
X9702
H0J921400003
9.216M
Q9706
2SK0620000L
Q9708
2SD0601A0L
Q9709
2SD0601A0L
Q9714
2SD0601A0L
Q9715
2SD0601A0L
Q9716
2SD0601A0L
D9730
MA3X152K0L
D9769
MA3X152K0L
D9771
MA3X152K0L
D9727
MA3X152K0L
D9724
MA2J11100L
D9719
MAZ30620ML
D9720
MAZ30620ML
D9723
MAZ30620ML
UNREG15V
1.8V
P5V
3.3V
VPP12V
STB5V_S

TH-42PA20U D-Board(7of11)Schematic Diagram

TH-42PA20U D-Board(7of11)Schematic Diagram

10 11 12 13 14 15 16 17 18

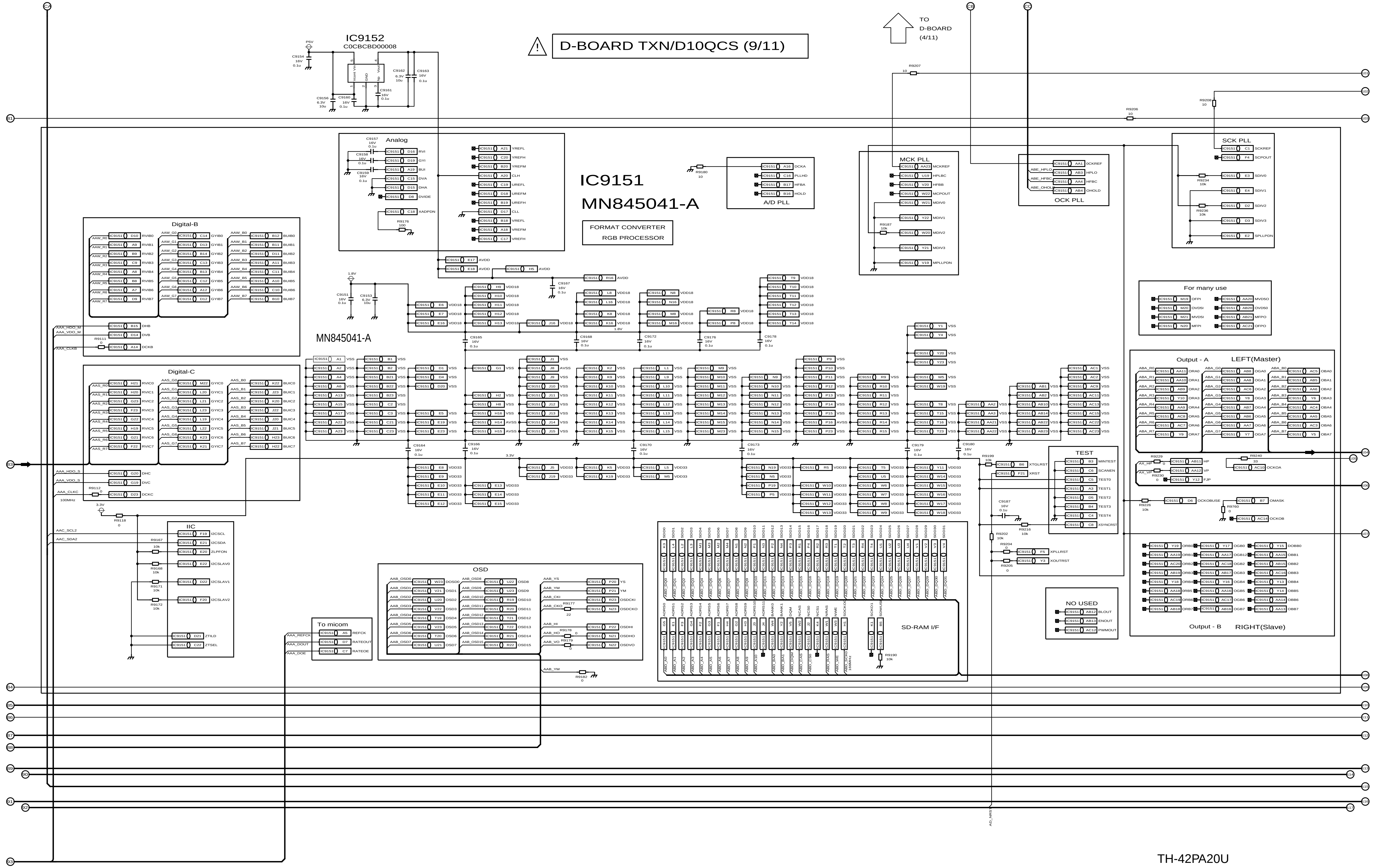
D-BOARD TXN/D10QCS (8/11)


TO
D-BOARD
(3/11)
DISCHARGE
CONTROL
OSD
SYNC PROCESSOR
IC9605
C1ZBZ0002329
XC2S200E-6PQG208C
(SPARTAN2E)
IC9606
C0EBE0000066
RESET
IC9608
C0ZBZ0000764
TE7720PF
FPGA
CONTROL
D10
Q9601
2SD0601A0L
Q9602
2SD0601A0L
R9807
EXB38V103JV
R9808
EXB38V103JV
R9153
EXB2HVR000V
R9154
EXB2HVR000V
R9157
EXB2HVR000V
R9693
EXB38V103JV
R9650
EXB38V103JV
R9653
EXB38V103JV
R9652
EXB38V103JV
STB5V_M
3.3V
1.8V
P5V

TH-42PA20U D-Board(8of11)Schematic Diagram

TH-42PA20U D-Board(8of11)Schematic Diagram

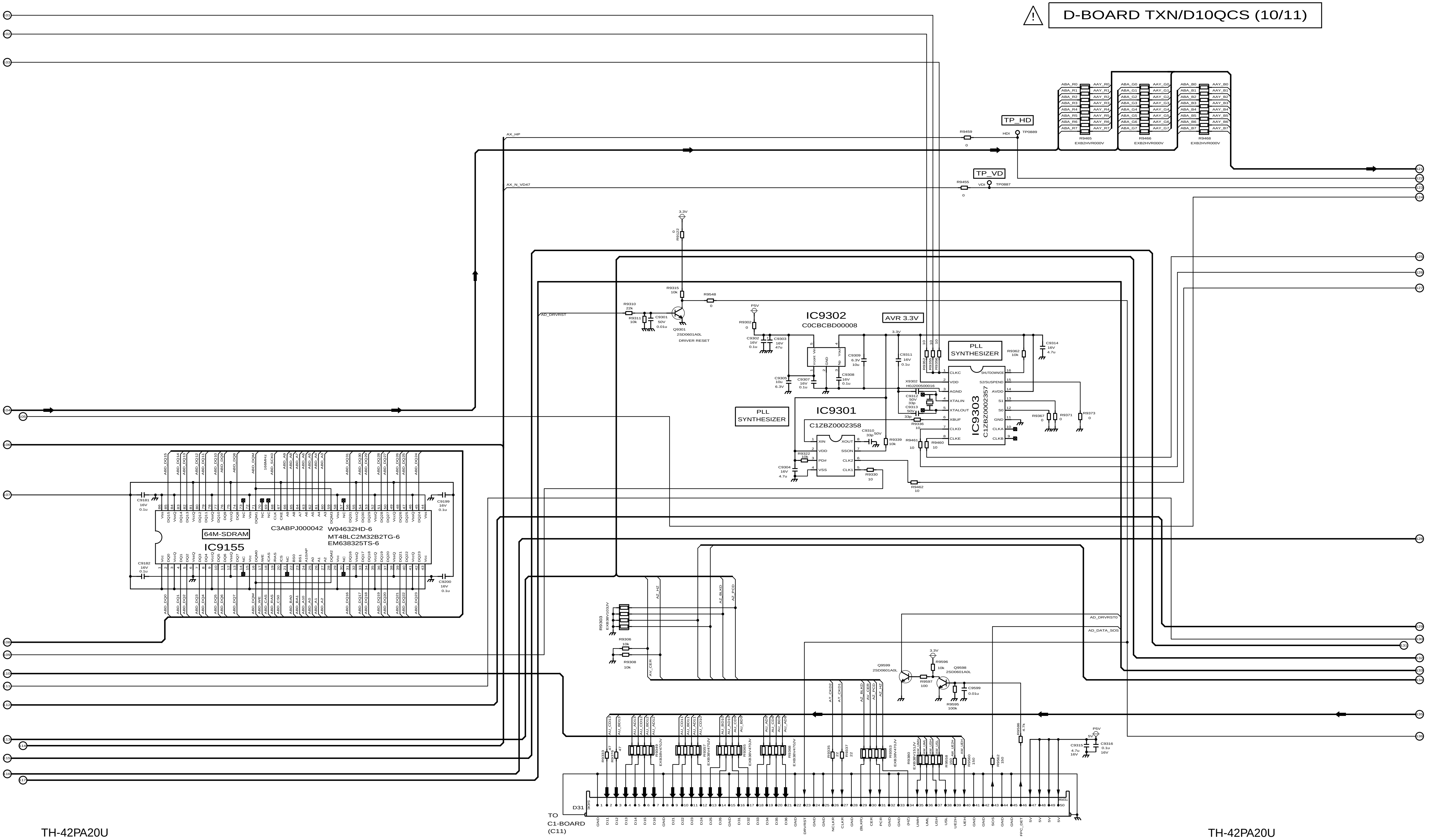
19	20	21	22	23	24	25	26	27


D-BOARD TXN/D10QCS (9/11)
TO D-BOARD (4/11)
IC9152
C0CBCBD00008
IC9151
MN845041-A
FORMAT CONVERTER
RGB PROCESSOR
Analog
A/D PLL
MCK PLL
OCK PLL
SCK PLL
Digital-B
Digital-C
For many use
Output - A
LEFT(Master)
Output - B
RIGHT(Slave)
TEST
IIC
To micom
OSD
SD-RAM I/F
NO USED
MN845041-A
PSV
1.8V
3.3V
100MHz

TH-42PA20U D-Board(9of11)Schematic Diagram

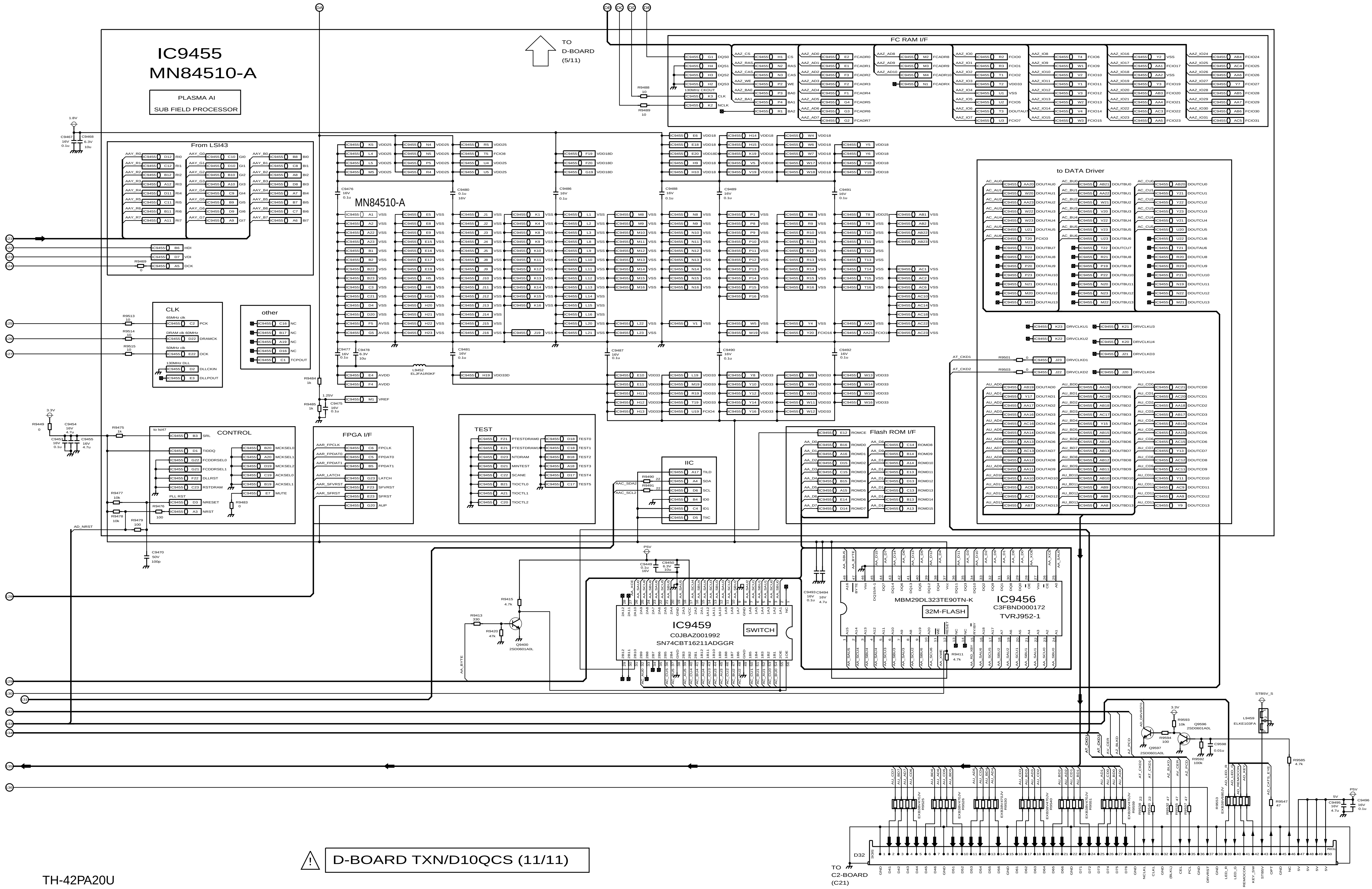
TH-42PA20U
D-Board(9of11)Schematic Diagram

D-BOARD TXN/D10QCS (10/11)


IC9155
64M-SDRAM
C3ABPJ000042
W94632HD-6
MT48LC2M32B2TG-6
EM638325TS-6
IC9302
C0CBCBD00008
AVR 3.3V
IC9301
C1ZBZ0002358
PLL SYNTHESIZER
PLL SYNTHESIZER
IC9303
C1ZBZ0002357
TP_HD
TP_VD
AX_HP
AX_N_VD47
AD_DRVRST
Q9301
2SD0601A0L
DRIVER RESET
R9465
EXB2HVR000V
R9466
EXB2HVR000V
R9468
EXB2HVR000V
Q9599
2SD0601A0L
Q9598
2SD0601A0L
AD_DRVRST0
AD_DATA_SOS
D31
TO
C1-BOARD
(C11)
3.3V
P5V

TH-42PA20U
D-Board(10of11)Schematic Diagram

TH-42PA20U
D-Board(10of11)Schematic Diagram

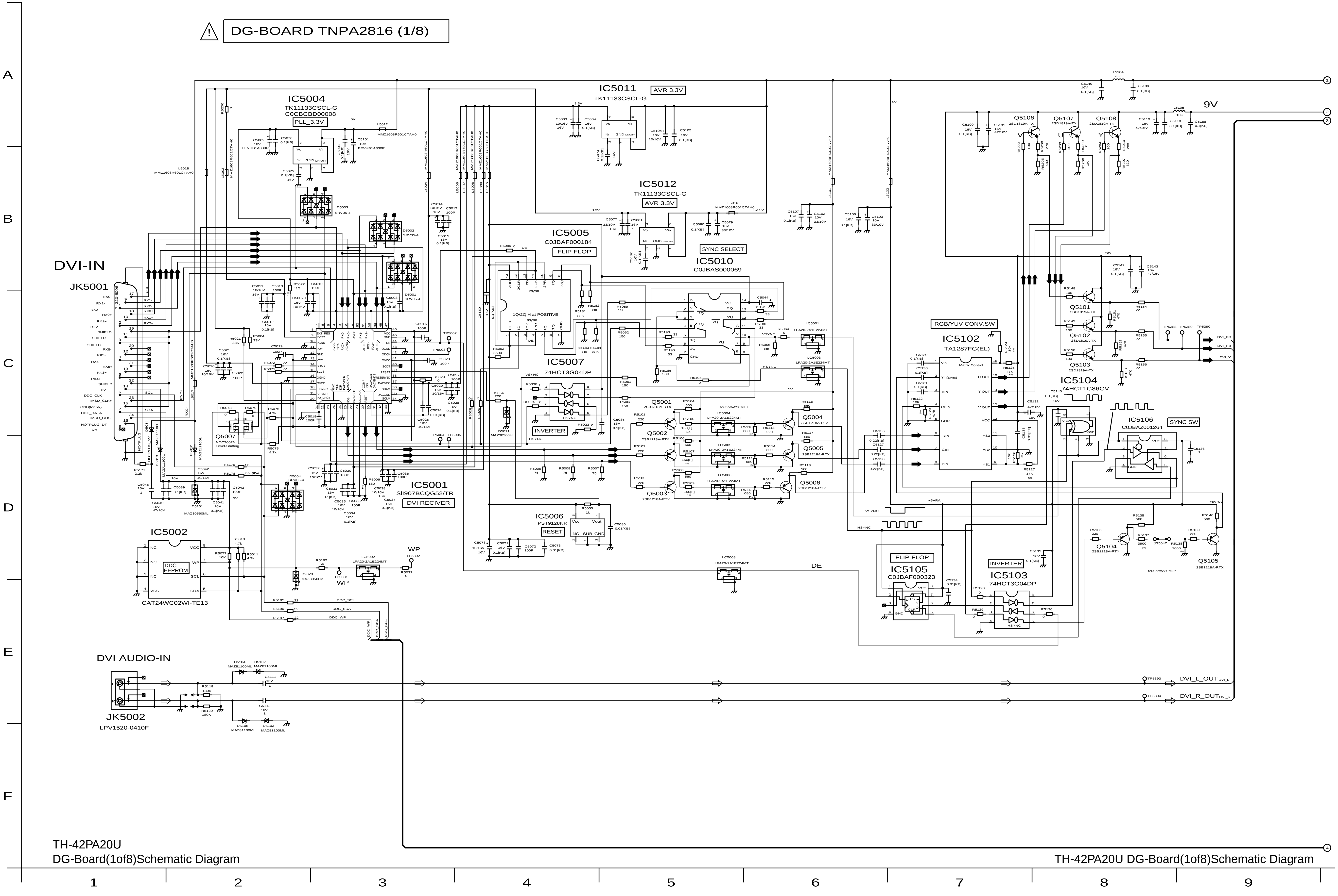

IC9455
MN84510-A
PLASMA AI
SUB FIELD PROCESSOR
TO
D-BOARD
(5/11)
FC RAM I/F
From LSI43
MN84510-A
to DATA Driver
CLK
other
CONTROL
FPGA I/F
TEST
IIC
Flash ROM I/F
IC9459
C0JBAZ001992
SN74CBT16211ADGGR
SWITCH
MBM29DL323TE90TN-K
32M-FLASH
IC9456
C3FBND000172
TVRJ952-1
TO
C2-BOARD
(C21)
D32

⚠ D-BOARD TXN/D10QCS (11/11)

TH-42PA20U
D-Board(11of11)Schematic Diagram

TH-42PA20U D-Board(11of11)Schematic Diagram

DG-BOARD TNPA2816 (1/8)

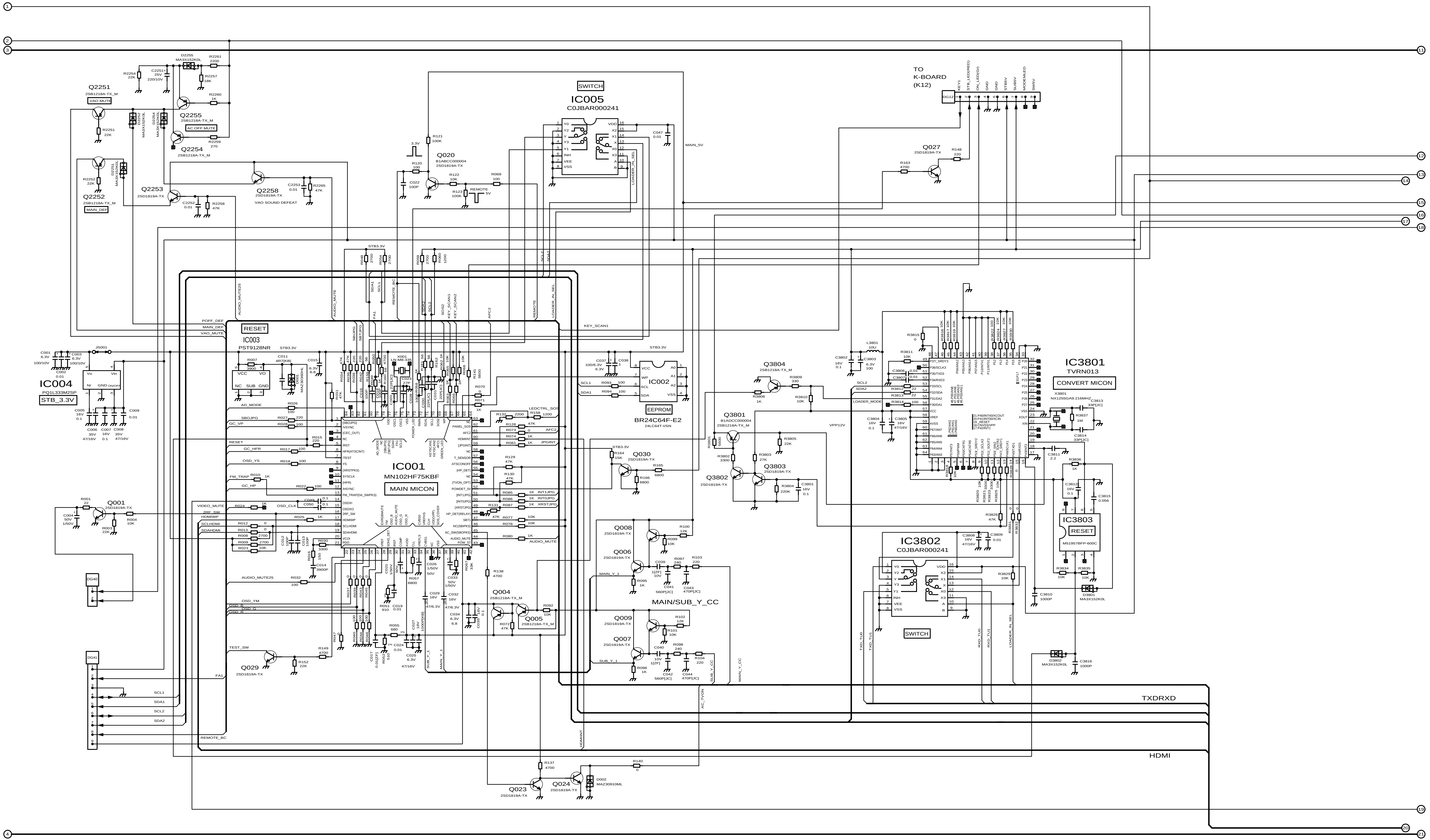


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
DVI-IN
JK5001
DVI AUDIO-IN
JK5002
LPV1520-0410F
IC5004
TK11133CSCL-G
C0CBCBD00008
PLL_3.3V
IC5011
TK11133CSCL-G
AVR 3.3V
IC5012
TK11133CSCL-G
AVR 3.3V
IC5005
C0JBAF000184
FLIP FLOP
IC5010
C0JBAS000069
SYNC SELECT
IC5007
74HCT3G04DP
INVERTER
IC5001
SiI907BCQG52/TR
DVI RECIVER
IC5002
CAT24WC02WI-TE13
DDC EEPROM
IC5006
PST9128NR
RESET
IC5102
TA1287FG(EL)
RGB/YUV CONV.SW
IC5104
74HCT1G86GV
IC5106
C0JBAZ001264
SYNC SW
IC5105
C0JBAF000323
FLIP FLOP
IC5103
74HCT3G04DP
INVERTER
Q5001
Q5002
Q5003
Q5004
Q5005
Q5006
2SB1218A-RTX
Q5007
NDC7002N
Level-Shifting
Q5101
Q5102
Q5103
2SD1819A-TX
Q5104
Q5105
2SB1218A-RTX
Q5106
Q5107
Q5108
2SD1819A-TX
9V
5V
+9V
+5VRA
VSYNC
HSYNC
DE
WP
DVI_PR
DVI_PB
DVI_Y
DVI_L_OUT
DVI_R_OUT
DDC_SCL
DDC_SDA
DDC_WP
fcut off=220MHz
1
2
3
4

TH-42PA20U
DG-Board(1of8)Schematic Diagram

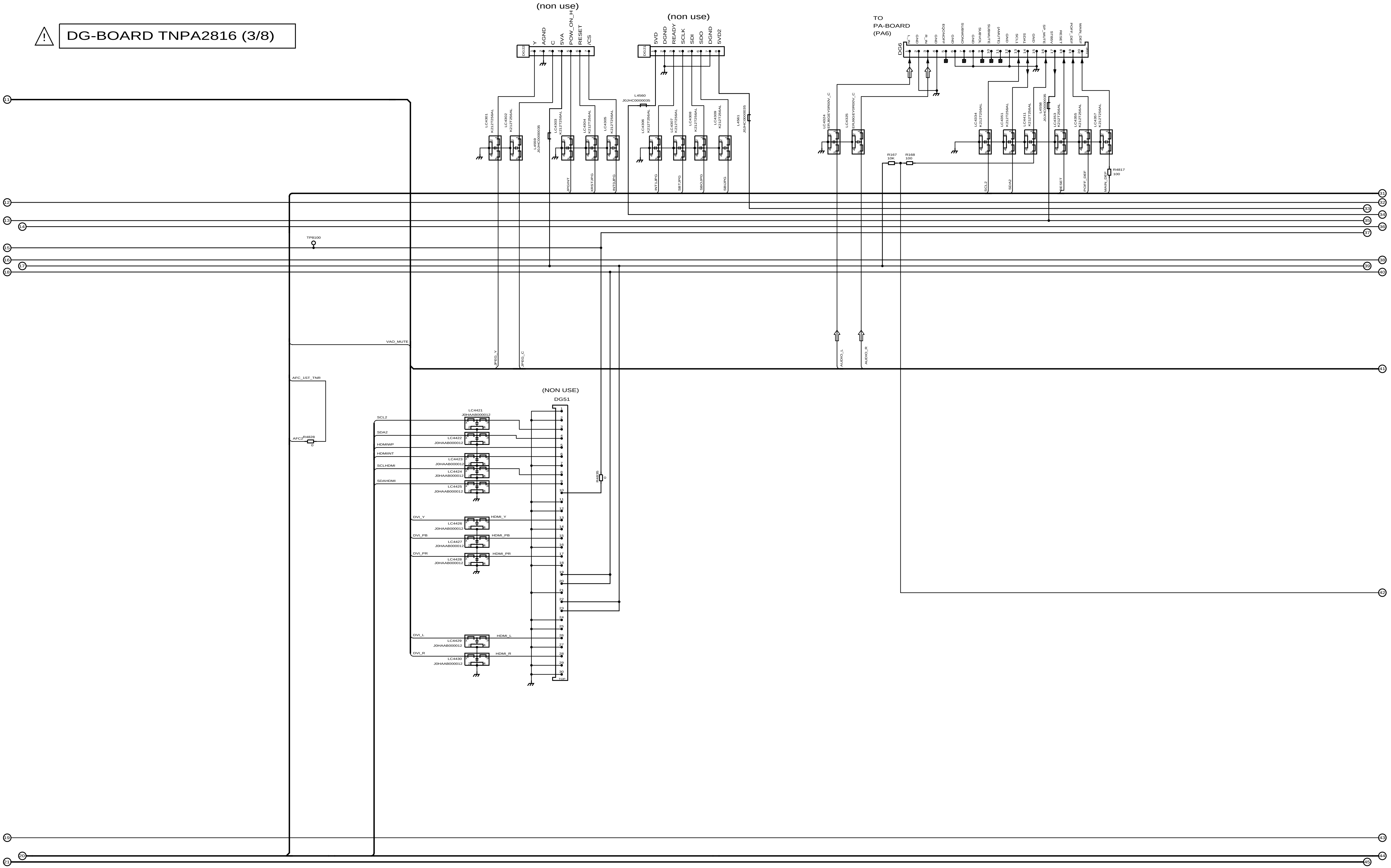
TH-42PA20U DG-Board(1of8)Schematic Diagram

DG-BOARD TNPA2816 (2/8)



IC001
MN102HF75KBF
MAIN MICON
IC002
BR24C64F-E2
24LC64T-I/SN
EEPROM
IC003
PST9128NR
RESET
IC004
PQ1L333M2SP
STB_3.3V
IC005
C0JBAR000241
SWITCH
IC3801
TVRN013
CONVERT MICON
IC3802
C0JBAR000241
SWITCH
IC3803
M51957BFP-600C
RESET
TO
K-BOARD
(K12)
DG12
DG40
DG41
Q001
Q004
Q005
Q006
Q007
Q008
Q009
Q020
Q023
Q024
Q027
Q029
Q030
Q2251
Q2252
Q2253
Q2254
Q2255
Q2258
Q3801
Q3802
Q3803
Q3804
VAO MUTE
AC OFF MUTE
MAIN_DEF
VAO SOUND DEFEAT
MAIN/SUB_Y_CC
X001
X3801
NX1255GA9.216MHZ
D002
MAZ30910ML
D2255
D3801
D3802
MA3X152K0L
TXDRXD
HDMI
MAIN_5V
STB3.3V
POFF_DEF
MAIN_DEF
VAO_MUTE
KEY_SCAN1
AUDIO_MUTE
AUDIO_MUTE25
REMOTE_BC
LOADER_IN_SEL
SCL1
SDA1
SCL2
SDA2
FA1
TEST_SW
OSD_YM
OSD_B
OSD_G
OSD_R
VIDEO_MUTE
2RF_SW
HDMIWP
SCLHDMI
SDAHDMI
AD_MODE
SBOJPG
GC_VP
RESET
GC_HFR
OSD_YS
FM_TRAP
GC_HP
OSD_CLK
REMOTE
LEDCTRL_SOS
AFC2
JPGINT
INT1JPG
INT0JPG
XRSTJPG
SUB_Y_1
MAIN_Y_1
SUB_Y_CC
MAIN_Y_CC
AC_TVON
HDMIINT
TXD_TU0
TXD_TU1
RXD_TU0
RXD_TU1
LOADER_MODE
VPP12V

⚠ DG-BOARD TNPA2816 (3/8)


(non use)
DG22
Y
AGND
C
5VA
POW_ON_H
RESET
/CS
LC4301
K212T256AL
LC4302
K212T256AL
L4559
J0JHC0000035
LC4303
K212T256AL
LC4304
K212T256AL
LC4305
K212T256AL
JPGINT
XRSTJPG
INT0JPG
(non use)
DG21
5VD
DGND
READY
SCLK
SDI
SDO
DGND
5VD2
L4560
J0JHC0000035
LC4306
K212T256AL
LC4307
K212T256AL
LC4308
K212T256AL
LC4309
K212T256AL
L4561
J0JHC0000035
INT1JPG
SBTJPG
SBOJPG
SBIJPG
TO
PA-BOARD
(PA6)
DG6
L_IN
GND
R_IN
GND
EQONOFF
GND
SUBMONO
GND
SUBVOL
SUBMUTE
(AMUTE)
GND
SCL1
SDA1
GND
SP_MUTE
STB5V
RESET
POFF_DEF
MAIN_DEF
TOP
LC4324
ERJ6GEY0R00V_C
LC4325
ERJ6GEY0R00V_C
R167
10K
R168
100
LC4334
K212T256AL
LC4351
K212T256AL
LC4411
K212T256AL
L4558
J0JHC0000035
LC4353
K212T256AL
LC4355
K212T256AL
LC4357
K212T256AL
R4817
100
SCL2
SDA2
RESET
POFF_DEF
MAIN_DEF
TP8100
VAO_MUTE
JPEG_Y
JPEG_C
AUDIO_L
AUDIO_R
AFC_1ST_TNR
AFC2
R4828
0
(NON USE)
DG51
LC4421
J0HAAB000012
SCL2
SDA2
HDMIWP
HDMIINT
SCLHDMI
SDAHDMI
LC4422
J0HAAB000012
LC4423
J0HAAB000012
LC4424
J0HAAB000012
LC4425
J0HAAB000012
R4835
0
DVI_Y
HDMI_Y
LC4426
J0HAAB000012
DVI_PB
HDMI_PB
LC4427
J0HAAB000012
DVI_PR
HDMI_PR
LC4428
J0HAAB000012
DVI_L
HDMI_L
LC4429
J0HAAB000012
DVI_R
HDMI_R
LC4430
J0HAAB000012
11
12
13
14
15
16
17
18
19
20
21
31
32
33
34
35
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39
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41
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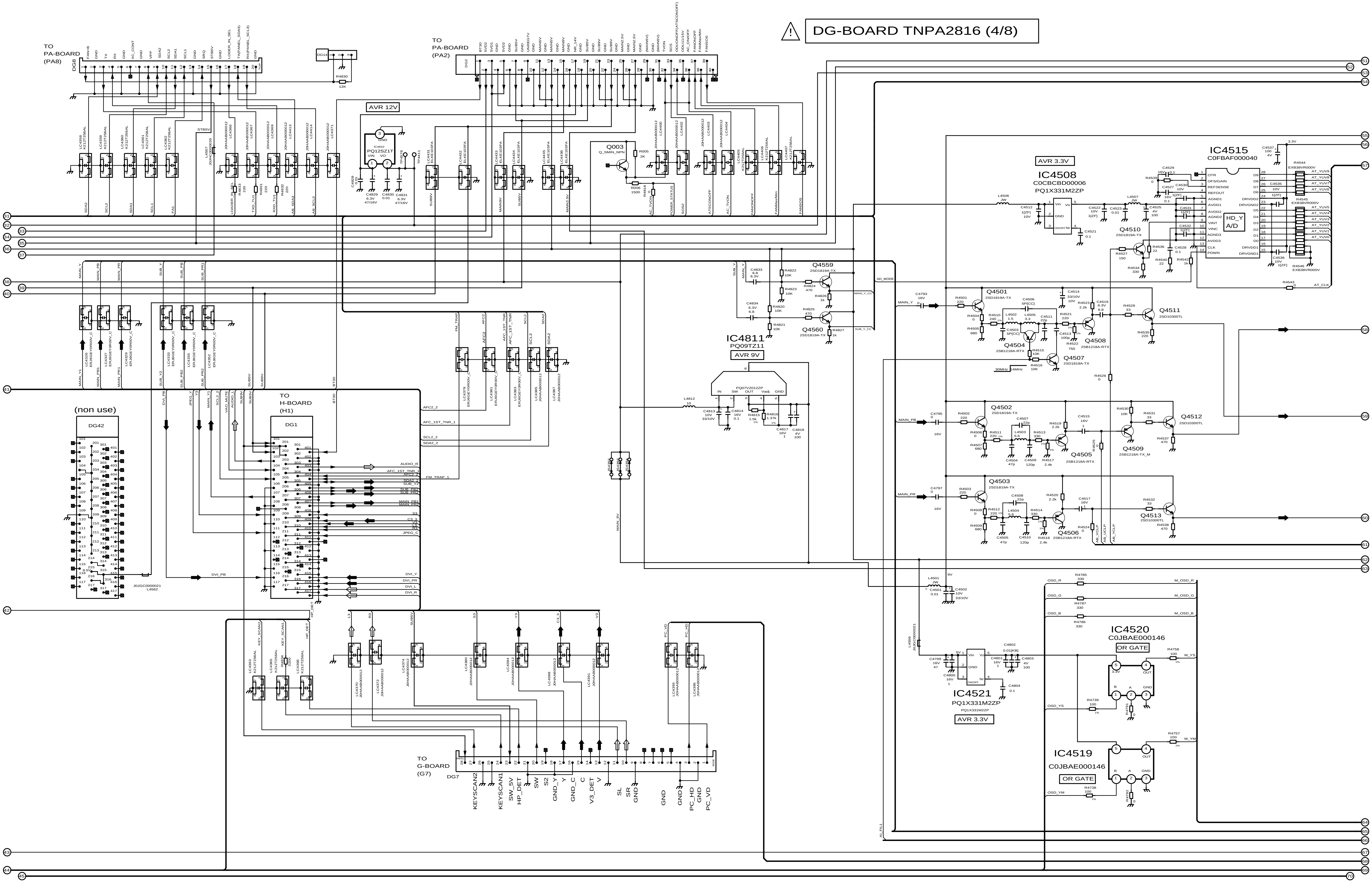
44
45

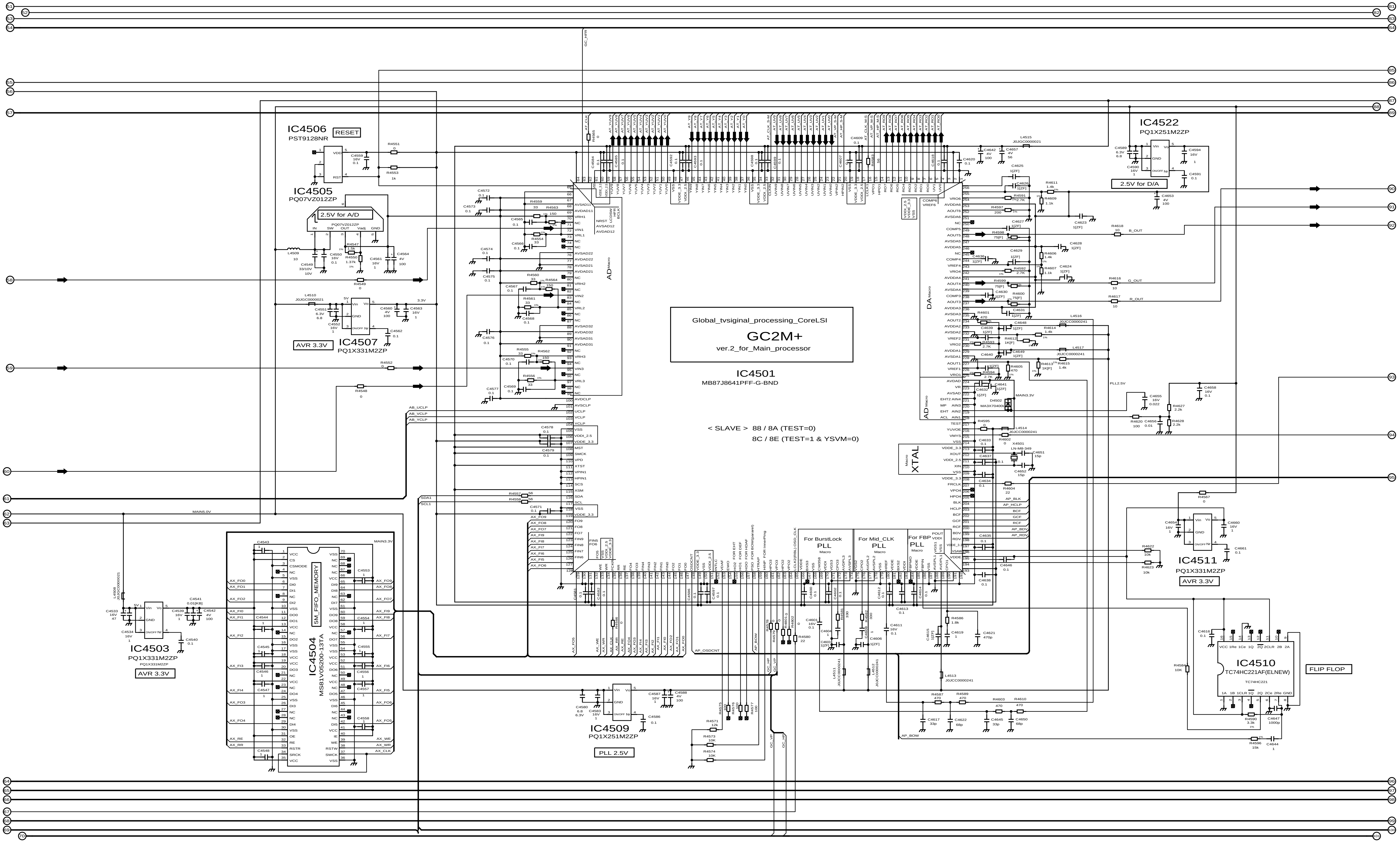
TH-42PA20U DG-Board(3of8)Schematic Diagram

TH-42PA20U DG-Board(3of8)Schematic Diagram

DG-BOARD TNPA2816 (4/8)


TO
PA-BOARD
(PA8)
DG8
TO
PA-BOARD
(PA2)
DG2
AVR 12V
IC4810
PQ12SZ1T
Q003
Q_SMIN_NPN
AVR 3.3V
IC4508
C0CBCBD00006
PQ1X331M2ZP
IC4515
C0FBAF000040
HD_Y
A/D
Q4510
Q4559
Q4560
IC4811
PQ09TZ11
AVR 9V
PQ07VZ012ZP
Q4501
Q4504
Q4507
Q4508
Q4511
Q4502
Q4505
Q4509
Q4512
Q4503
Q4506
Q4513
TO
H-BOARD
(H1)
DG1
(non use)
DG42
IC4521
PQ1X331M2ZP
AVR 3.3V
IC4520
C0JBAE000146
OR GATE
IC4519
C0JBAE000146
OR GATE
TO
G-BOARD
(G7)
DG7
KEYSCAN2
KEYSCAN1
SW_5V
HP_DET
SW
S2
GND_Y
Y
GND_C
C
V3_DET
V
SL
SR
GND
GND
GND
PC_HD
GND
PC_VD

DG-BOARD TNPA2816 (5/8)

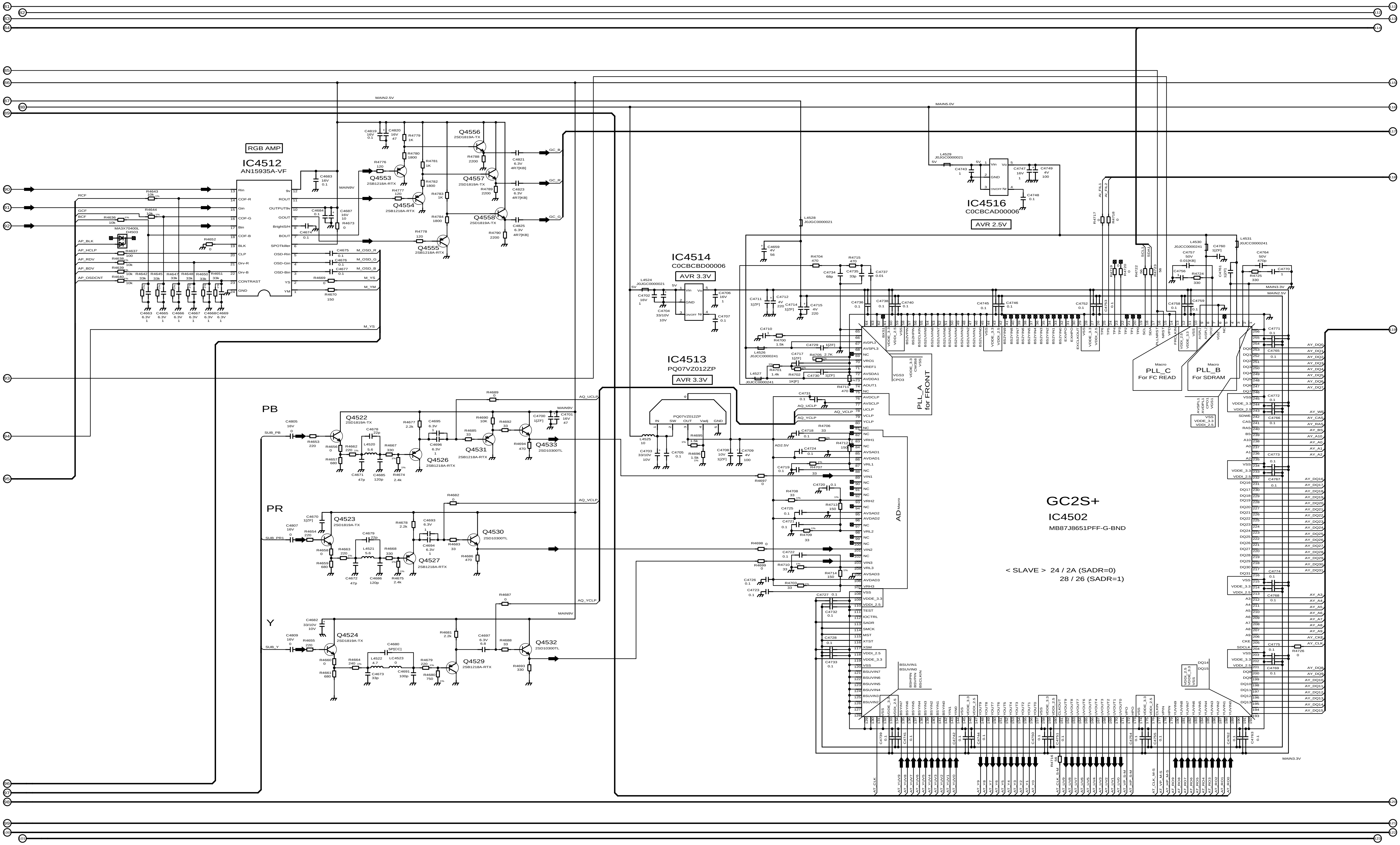


IC4506
PST9128NR
RESET
IC4505
PQ07VZ012ZP
2.5V for A/D
IC4507
PQ1X331M2ZP
AVR 3.3V
IC4522
PQ1X251M2ZP
2.5V for D/A
Global_tvsiginal_processing_CoreLSI
GC2M+
ver.2_for_Main_processor
IC4501
MB87J8641PFF-G-BND
< SLAVE > 88 / 8A (TEST=0)
8C / 8E (TEST=1 & YSVM=0)
AD Macro
DA Macro
XTAL Macro
For BurstLock PLL Macro
For Mid_CLK PLL Macro
For FBP PLL Macro
IC4504
MS81V05200-13TA
5M_FIFO_MEMORY
IC4503
PQ1X331M2ZP
AVR 3.3V
IC4509
PQ1X251M2ZP
PLL 2.5V
IC4511
PQ1X331M2ZP
AVR 3.3V
IC4510
TC74HC221AF(ELNEW)
FLIP FLOP
B_OUT
G_OUT
R_OUT
MAIN3.3V
MAINS.0V
PLL2.5V
AP_BOW
AP_OSDCNT
X4501
LN-M8-349
D4502
MA3X704000L

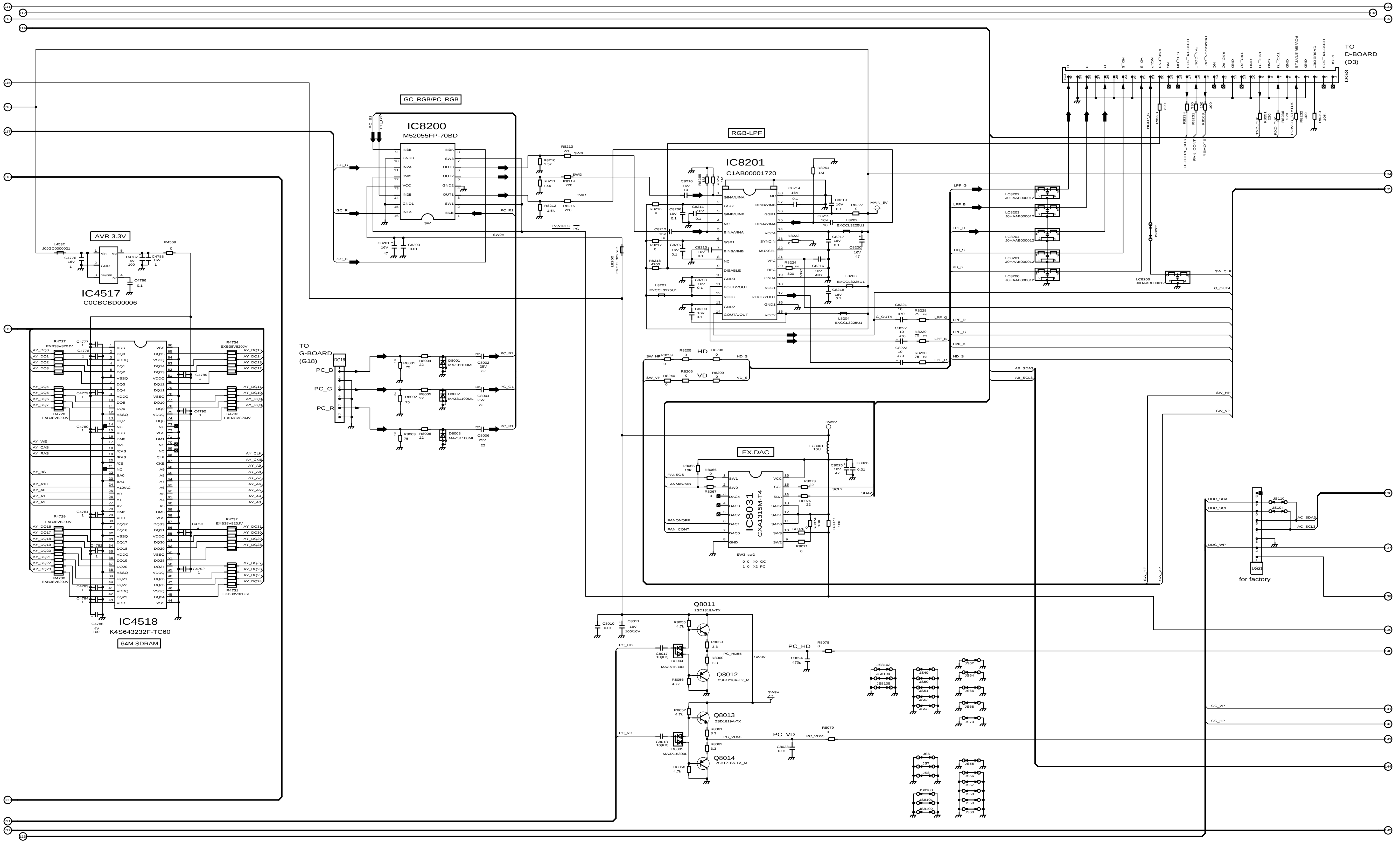
TH-42PA20U DG-Board(5of8)Schematic Diagram

TH-42PA20U DG-Board(5of8)Schematic Diagram

⚠ DG-BOARD TNPA2816 (6/8)


RGB AMP
IC4512
AN15935A-VF
Q4553
Q4554
Q4555
Q4556
Q4557
Q4558
GC_B
GC_R
GC_G
MAIN2.5V
MAIN5.0V
MAIN9V
PB
SUB_PB
Q4522
Q4526
Q4531
Q4533
PR
SUB_PR1
Q4523
Q4527
Q4530
Y
SUB_Y
Q4524
Q4529
Q4532
AQ_UCLP
AQ_VCLP
AQ_YCLP
IC4514
C0CBCBD00006
AVR 3.3V
IC4513
PQ07VZ012ZP
AVR 3.3V
IC4516
C0CBCAD00006
AVR 2.5V
PLL_A
for FRONT
Macro
PLL_C
For FC READ
Macro
PLL_B
For SDRAM
AD Macro
GC2S+
IC4502
MB87J8651PFF-G-BND
< SLAVE > 24 / 2A (SADR=0)
28 / 26 (SADR=1)
MAIN3.3V

⚠ DG-BOARD TNPA2816 (7/8)



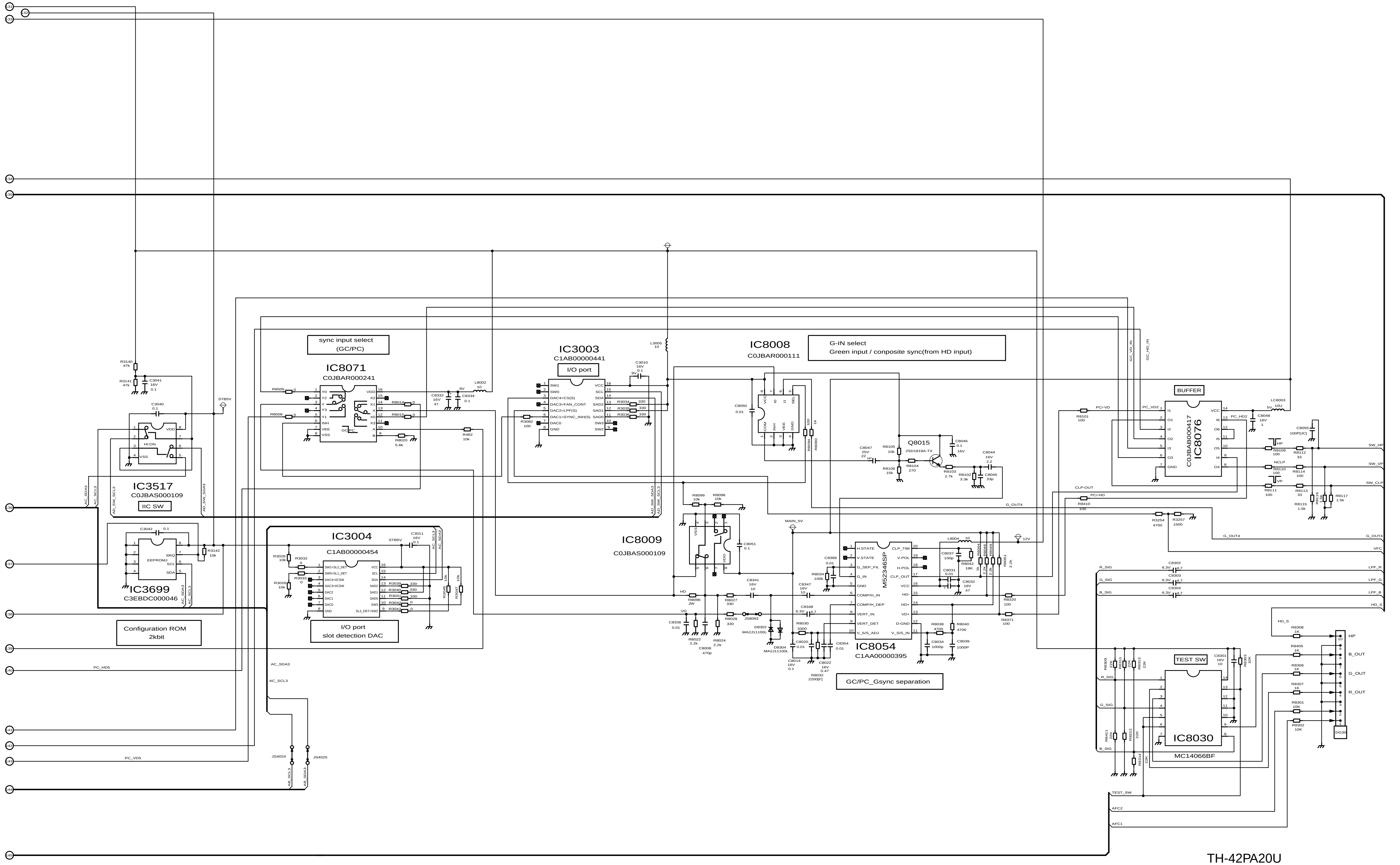
IC8200
M52055FP-70BD
GC_RGB/PC_RGB
IC8201
C1AB00001720
RGB-LPF
IC4517
C0CBCBD00006
AVR 3.3V
IC4518
K4S643232F-TC60
64M SDRAM
IC8031
CXA1315M-T4
EX.DAC
TO
G-BOARD
(G18)
PC_B
PC_G
PC_R
DG18
TO
D-BOARD
(D3)
DG3
DG31
for factory
Q8011
2SD1819A-TX
Q8012
2SB1218A-TX_M
Q8013
2SD1819A-TX
Q8014
2SB1218A-TX_M
PC_HD
PC_VD
HD
VD
MAIN_5V
SW9V
LPF_G
LPF_B
LPF_R
HD_S
VD_S
SW_CLP
G_OUT4
AB_SDA3
AB_SCL3
SW_HP
SW_VP
DDC_SDA
DDC_SCL
DDC_WP
AC_SDA3
AC_SCL3
GC_VP
GC_HP

TH-42PA20U DG-Board(7of8)Schematic Diagram

TH-42PA20U DG-Board(7of8)Schematic Diagram

55	56	57	58	59	60	61	62	63

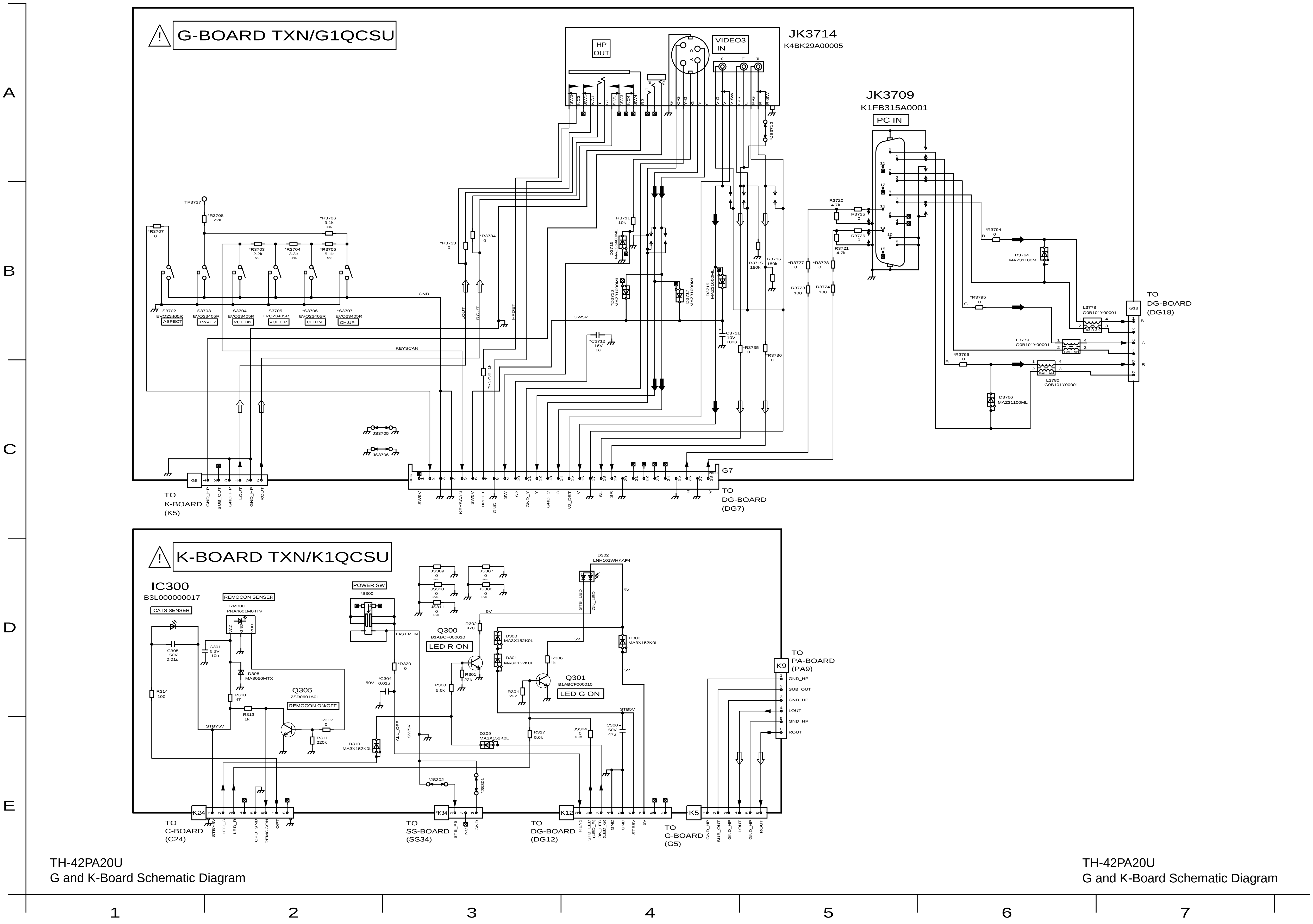
⚠ DG-BOARD TNPA2816 (8/8)


sync input select
(GC/PC)
IC8071
C0JBAR000241
IC3003
C1AB00000441
I/O port
IC8008
C0JBAR000111
G-IN select
Green input / conposite sync(from HD input)
IC3517
C0JBAS000109
IIC SW
IC3699
C3EBDC000046
EEPROMJ
Configuration ROM
2kbit
IC3004
C1AB00000454
I/O port
slot detection DAC
IC8009
C0JBAS000109
Q8015
2SD1819A-TX
IC8054
C1AA00000395
M52346SP
GC/PC_Gsync separation
BUFFER
C0JBAB000417
IC8076
TEST SW
IC8030
MC14066BF
MAIN_5V
STB5V
12V
AC_SDA3
AC_SCL3
AD_SW_SCL3
AD_SW_SDA3
AB_SCL3
AB_SDA3
PC_HD5
PC_VD5
GC_VD_IN
GC_HD_IN
PC/-VD
PC_VD2
PC_HD2
PC/-HD
CLP-OUT
G_OUT4
SW_HP
SW_VP
SW_CLP
VFC
LPF_R
LPF_G
LPF_B
HD_S
R_SIG
G_SIG
B_SIG
HP
B_OUT
G_OUT
R_OUT
DG30
TEST_SW
AFC2
AFC1
JS4024
JS4025
JS8093
D8302
D8304
MA2J1100L
L3005
L8002
L8004
LC8003
HD
VD

TH-42PA20U DG-Board(8of8)Schematic Diagram

TH-42PA20U
DG-Board(8of8)Schematic Diagram

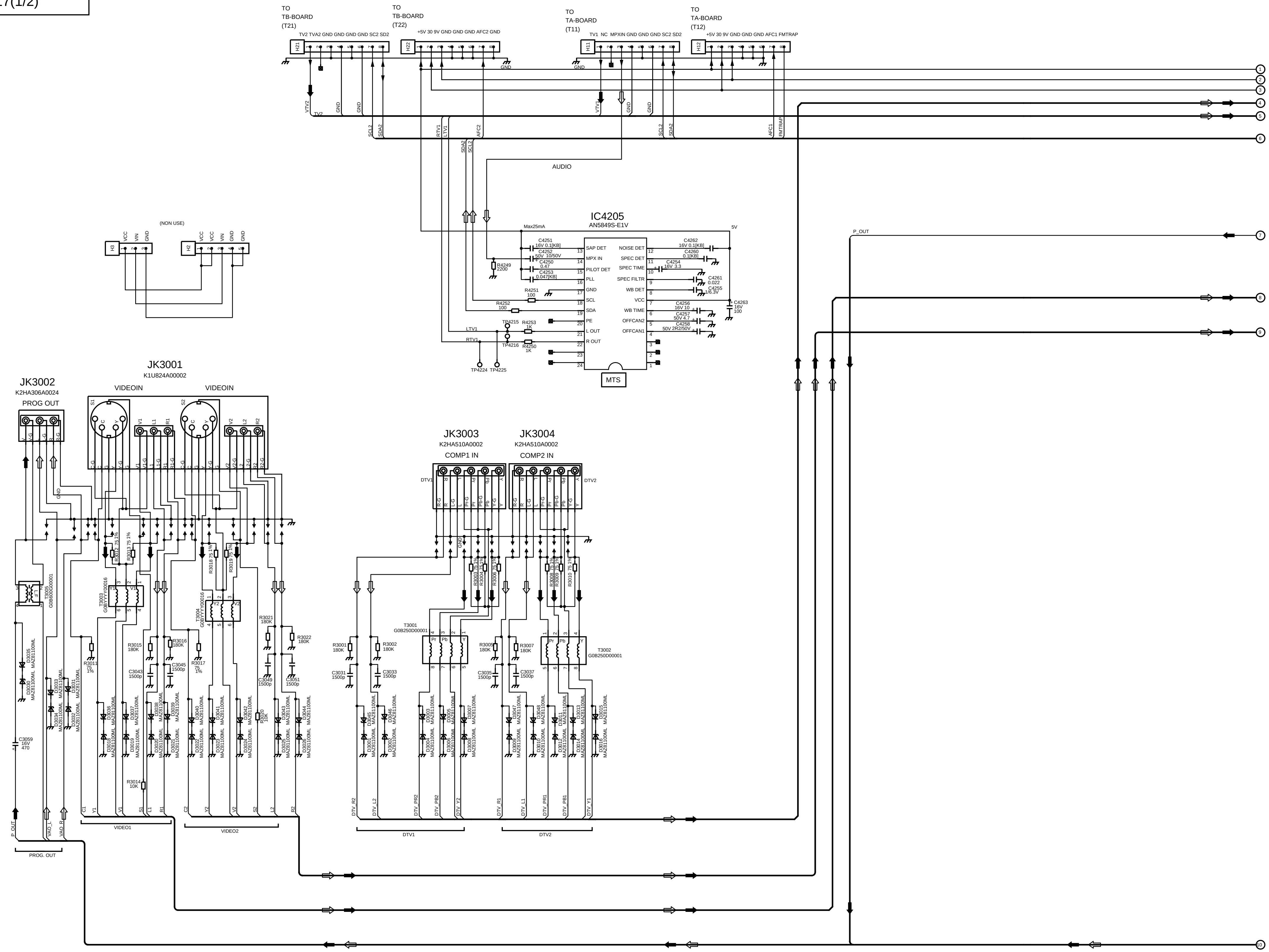
64 65 66 67 68 69 70 71 72


A
B
C
D
E
1
2
3
4
5
6
7
G-BOARD TXN/G1QCSU
JK3714
K4BK29A00005
HP OUT
VIDEO3 IN
JK3709
K1FB315A0001
PC IN
TP3737
S3702 EVQ23405R ASPECT
S3703 EVQ23405R TV/VTR
S3704 EVQ23405R VOL.DN
S3705 EVQ23405R VOL.UP
*S3706 EVQ23405R CH.DN
*S3707 EVQ23405R CH.UP
GND
SW5V
KEYSCAN
JS3705
JS3706
D3715 MAZ31000ML
D3716 MAZ31000ML
D3717 MAZ31000ML
D3719 MAZ31000ML
C3711 10V 100u
*C3712 16V 1u
D3764 MAZ31100ML
D3766 MAZ31100ML
L3778 G0B101Y00001
L3779 G0B101Y00001
L3780 G0B101Y00001
G18
TO DG-BOARD (DG18)
G5
TO K-BOARD (K5)
G7
TO DG-BOARD (DG7)
GND_HP
SUB_OUT
GND_HP
LOUT
GND_HP
ROUT
SW9V
KEYSCAN
SW5V
HPDET
GND
SW
S2
GND_Y
Y
GND_C
C
V3_DET
L
SL
SR
R
H
V
K-BOARD TXN/K1QCSU
IC300
B3L000000017
CATS SENSER
REMOCON SENSER
RM300 PNA4601M04TV
POWER SW
*S300
Q300 B1ABCF000010
LED R ON
Q301 B1ABCF000010
LED G ON
Q305 2SD0601A0L
REMOCON ON/OFF
D302 LNH101WHKAF4
D300 MA3X152K0L
D301 MA3X152K0L
D303 MA3X152K0L
D308 MA8056MTX
D309 MA3X152K0L
D310 MA3X152K0L
C300 50V 47u
C301 6.3V 10u
C305 50V 0.01u
*C304 0.01u
K9
TO PA-BOARD (PA9)
K24
TO C-BOARD (C24)
STBY5V
LED_G
LED_R
CPU_GND
REMOCON
OPT
*K34
TO SS-BOARD (SS34)
STB_PS
NC
GND
K12
TO DG-BOARD (DG12)
KEY1
STB_LED (LED_R)
ON_LED (LED_G)
GND
GND
STB5V
5V
K5
TO G-BOARD (G5)
GND_HP
SUB_OUT
GND_HP
LOUT
GND_HP
ROUT

TH-42PA20U
G and K-Board Schematic Diagram

TH-42PA20U
G and K-Board Schematic Diagram

⚠ H-BOARD TNPA2817(1/2)


TO TB-BOARD (T21)
TV2 TVA2 GND GND GND GND SC2 SD2
H21
TO TB-BOARD (T22)
+5V 30 9V GND GND GND AFC2 GND
H22
TO TA-BOARD (T11)
TV1 NC MPXIN GND GND GND SC2 SD2
H11
TO TA-BOARD (T12)
+5V 30 9V GND GND GND AFC1 FMTRAP
H12
VTV2
TV2
GND
SCL2
SDA2
RTV1
LTV1
AFC2
VTV1
AFC1
FMTRAP
AUDIO
IC4205
AN5849S-E1V
Max25mA
5V
SAP DET
MPX IN
PILOT DET
PLL
GND
SCL
SDA
PE
L OUT
R OUT
NOISE DET
SPEC DET
SPEC TIME
SPEC FILTR
WB DET
VCC
WB TIME
OFFCAN2
OFFCAN1
MTS
P_OUT
(NON USE)
H3
H2
VCC
VIN
GND
JK3002
K2HA306A0024
PROG OUT
JK3001
K1U824A00002
VIDEOIN
VIDEOIN
JK3003
K2HA510A0002
COMP1 IN
JK3004
K2HA510A0002
COMP2 IN
DTV1
DTV2
T3001
G0B250D00001
T3002
G0B250D00001
T3003
T3004
T3005
P_OUT
VAO_L
VAO_R
PROG. OUT
C1 Y1 V1 S1 L1 R1
VIDEO1
C2 Y2 V2 S2 L2 R2
VIDEO2
DTV_PR2 DTV_L2 DTV_PR2 DTV_PB2 DTV_Y2
DTV1
DTV_R1 DTV_L1 DTV_PR1 DTV_PB1 DTV_Y1
DTV2
1
2
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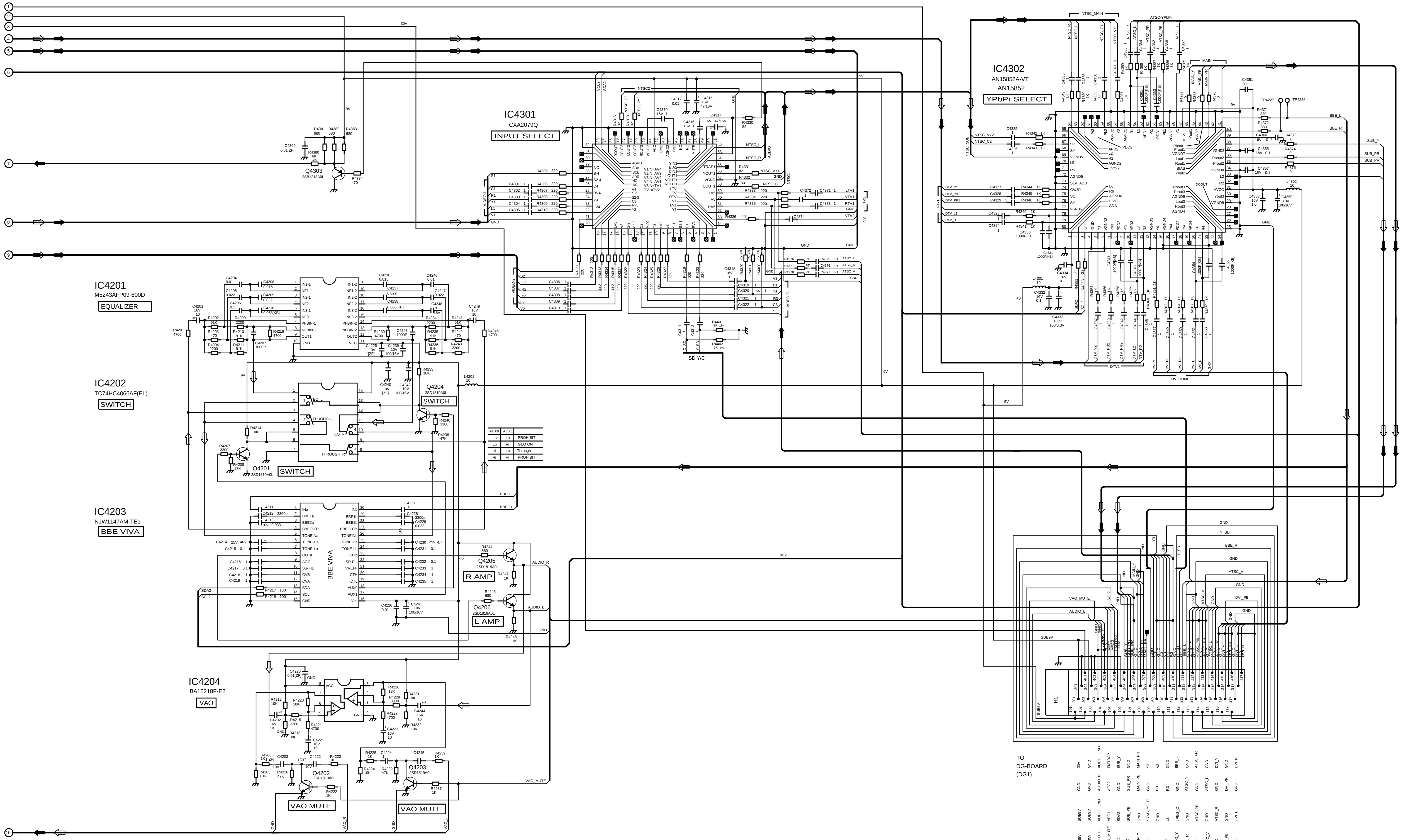
TH-42PA20U
H-Board(1of2)Schematic Diagram

H-BOARD TNPA2817(2/2)


IC4301
CXA2079Q
INPUT SELECT
IC4302
AN15852A-VT
AN15852
YPbPr SELECT
IC4201
M5243AFP09-600D
EQUALIZER
IC4202
TC74HC4066AF(EL)
SWITCH
IC4203
NJW1147AM-TE1
BBE VIVA
IC4204
BA15218F-E2
VAO
Q4201
2SD1819A0L
SWITCH
Q4204
2SD1819A0L
SWITCH
Q4205
2SD1819A0L
R AMP
Q4206
2SD1819A0L
L AMP
Q4202
2SD1819A0L
VAO MUTE
Q4203
2SD1819A0L
VAO MUTE
Q4303
2SB1218A0L
SD Y/C
NTSC_MAIN
ATSC-YPbPr
MAIN
DTV2
DVI/HDMI
AUDIO_R
AUDIO_L
VAO_MUTE
BBE_L
BBE_R
SUB_Y
SUB_PB
SUB_PR
IIC2
30V
9V
5V
GND
H1
TO
DG-BOARD
(DG1)
AUX0
AUX1
Lo
Hi
PROHIBIT
GEQ ON
Through
EQ_L
THROUGH_L
EQ_R
THROUGH_R

TH-42PA20U
H-Board(2of2)Schematic Diagram

TH-42PA20U H-Board(2of2)Schematic Diagram

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacture's specified parts.

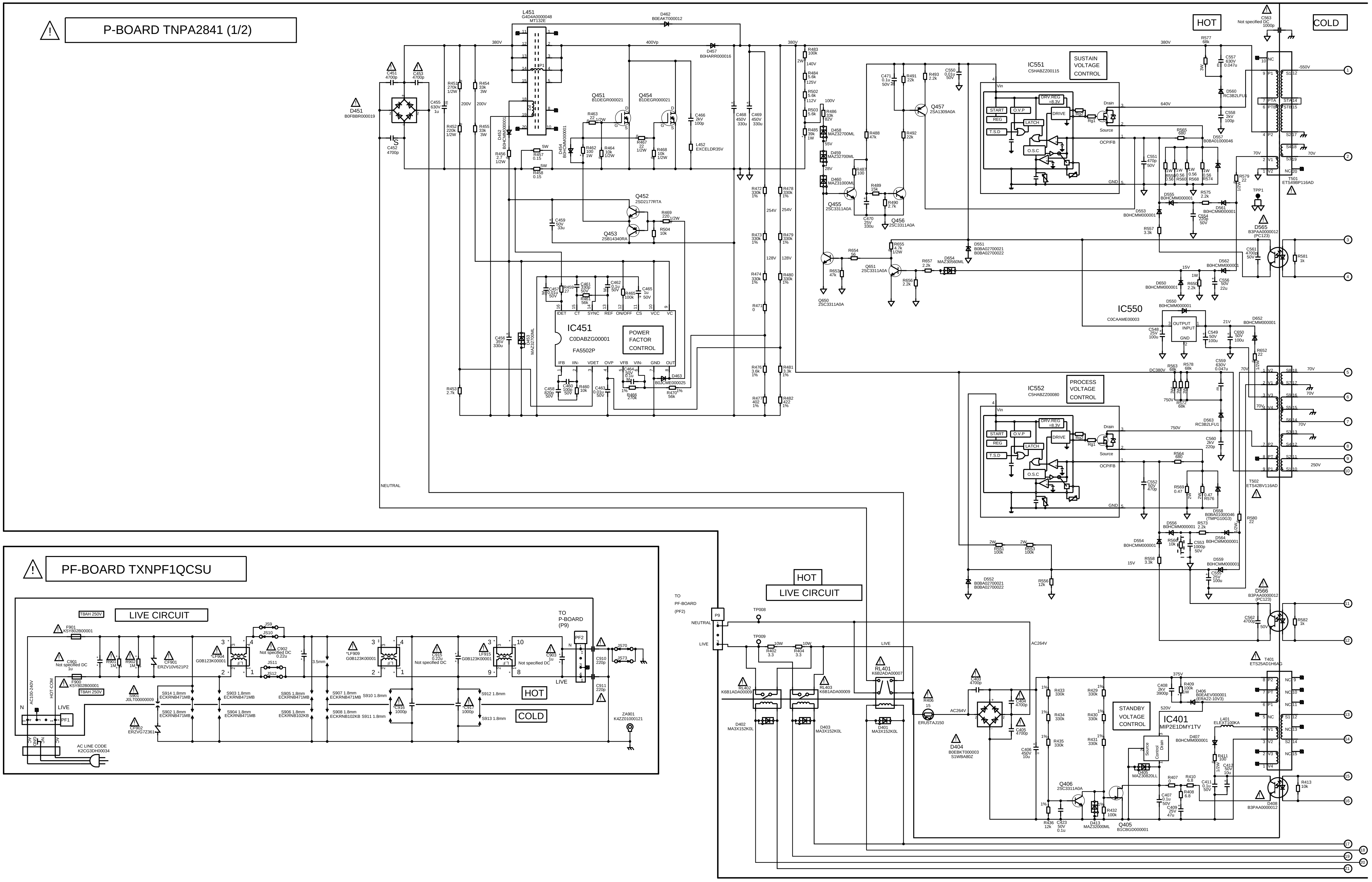
Notes:

1. **Resistor**
   All resistors are cabon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).
   ○ : Nonflammable ⊠ : Metal Oxide
   △ : Solid ◎ : Metal Film
   ⧄ : Wire Wound ⊗ : Fuse**:**
2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is µF, unless otherwise noted.
   ⊗ : Temperature Compensation +⊣⊢ : Electrolytic
   Ⓜ : Polyester NP⊣⊢ : Bipolar
   ⓜ : Metalized Polyester Ⓣ : Dipped Tantalum
   ⊠ : Polypropylene Ⓩ : Z-Type
3. Coil
   Unit of inductance is µF, unless otherwise noted.
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ⊽ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured by a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source AC120V, 50/60Hz
   Receiving Signal .... Colour Bar signal (RF)
   All customer's controls .... Maximum positions
7. Number in red circle indicates waveform nember.
   (See waveform pattern table.)
8. When arrow mark (↗) is found, connection is easily found from the direction of arrow

9. Indicates the major signal flow. : Video ➡ Audio ⇨
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the follwing precautions.
   All circuits, except the Power Circuit, are cold.
   Precautions
   - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
   - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
   - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.
     Connect the earth of instruments to the earth connection of the circuit being measured.
   - d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.
   MA150- MA162 (Replacement part)


P-BOARD TNPA2841 (1/2)
PF-BOARD TXNPF1QCSU
HOT
COLD
LIVE CIRCUIT
HOT
LIVE CIRCUIT
HOT
COLD
IC451
C0DABZG00001
FA5502P
POWER FACTOR CONTROL
IC551
C5HABZZ00115
SUSTAIN VOLTAGE CONTROL
IC552
C5HABZZ00080
PROCESS VOLTAGE CONTROL
IC550
C0CAAME00003
IC401
MIP2E1DMY1TV
STANDBY VOLTAGE CONTROL
L451
G4D4A0000048
MT132E
D451
B0FBBR000019
Q451
B1DEGR000021
Q454
B1DEGR000021
Q452
2SD2177RTA
Q453
2SB1434ORA
Q457
2SA1309A0A
Q455
2SC3311A0A
Q456
2SC3311A0A
Q651
2SC3311A0A
Q650
2SC3311A0A
T501
ETS49BP116AD
T502
ETS42BV116AD
T401
ETS25AD1H6AG
RL401
K6B2ADA00007
RL402
K6B1ADA00009
RL403
K6B1ADA00009
D401
MA3X152K0L
D402
MA3X152K0L
D403
MA3X152K0L
D404
B0EBKT000003
S1WBA80Z
R406
15
ERU5TAJ150
D565
B3PAA0000012
(PC123)
D566
B3PAA0000012
(PC123)
D408
B3PAA0000012
Q406
2SC3311A0A
Q405
B1CBGD000001
P9
TO PF-BOARD (PF2)
NEUTRAL
LIVE
TP008
TP009
AC264V
380V
400Vp
250V
70V
-550V
640V
750V
DRV.REG =8.3V
START
O.V.P
REG
LATCH
DRIVE
T.S.D
O.S.C
Drain
Source
OCP/FB
GND
Vin
F901
K5YB02B00001
F900
K5YB02B00001
T8AH 250V
C901
Not specified DC 1u
CF901
ERZV10V621P2
LF904
G0B123K00001
LF909
G0B123K00001
LF915
G0B123K00001
JS9
JS10
JS11
JS12
JS70
JS73
S901
J0LT00000009
CF902
ERZVG7Z361
ZA901
K4ZZ01000121
PF1
PF2
TO P-BOARD (P9)
AC LINE CODE
K2CG3DH00034
AC100-240V
HOT-COM
N
LIVE
NEUTRAL
A
B
C
D
E
F
1
2
3
4
5
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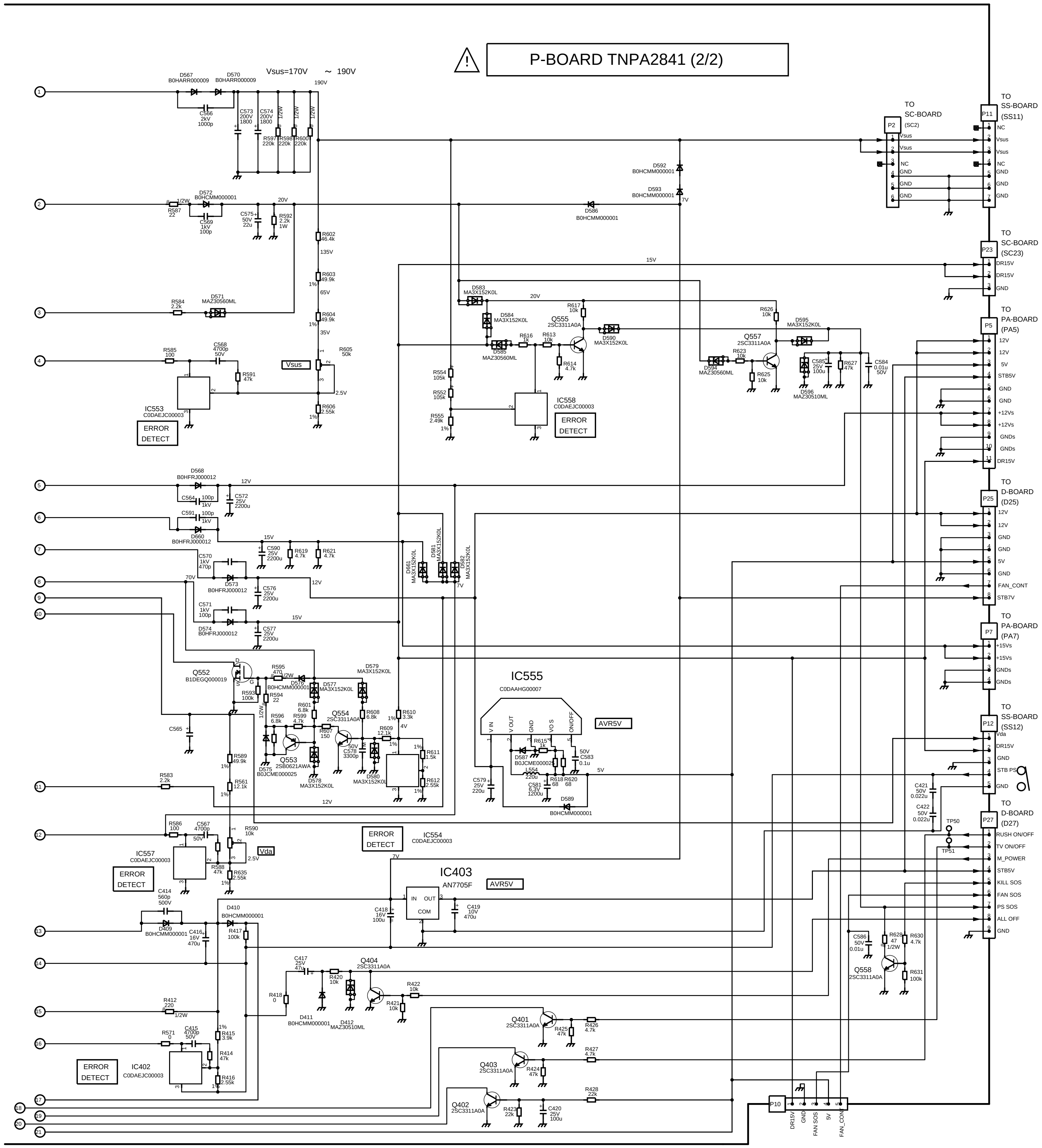
TH-42PA20U
PF and P-Board(1of2)Schematic Diagram

TH-42PA20U
PF and P-Board(1of2)Schematic Diagram


P-BOARD TNPA2841 (2/2)
Vsus=170V ~ 190V
190V
D567 B0HARR000009
D570 B0HARR000009
C566 2kV 1000p
C573 200V 1800
C574 200V 1800
R597 220k
R598 220k
R600 220k
1/2W
D572 B0HCMM000001
R587 22
1/2W
C569 1kV 100p
C575 50V 22u
R592 2.2k 1W
20V
R602 46.4k
135V
R603 49.9k
65V
R604 49.9k
35V
R605 50k
Vsus
2.5V
R606 2.55k
1%
R584 2.2k
D571 MAZ30560ML
R585 100
C568 4700p 50V
R591 47k
IC553 C0DAEJC00003
ERROR DETECT
D592 B0HCMM000001
D593 B0HCMM000001
7V
D586 B0HCMM000001
15V
D583 MA3X152K0L
20V
D584 MA3X152K0L
Q555 2SC3311A0A
R617 10k
D590 MA3X152K0L
R616 1k
R613 10k
R614 4.7k
D585 MAZ30560ML
R554 105k
R552 105k
R555 2.49k
IC558 C0DAEJC00003
ERROR DETECT
R626 10k
D595 MA3X152K0L
Q557 2SC3311A0A
R623 10k
D594 MAZ30560ML
R625 10k
C585 25V 100u
R627 47k
C584 0.01u 50V
D596 MAZ30510ML
TO SC-BOARD
P2 (SC2)
Vsus
Vsus
NC
GND
GND
GND
TO SS-BOARD (SS11)
P11
NC
Vsus
Vsus
NC
GND
GND
GND
TO SC-BOARD (SC23)
P23
DR15V
DR15V
GND
TO PA-BOARD (PA5)
P5
12V
12V
5V
STB5V
GND
GND
+12Vs
+12Vs
GNDs
GNDs
DR15V
TO D-BOARD (D25)
P25
12V
12V
GND
GND
5V
GND
FAN_CONT
STB7V
TO PA-BOARD (PA7)
P7
+15Vs
+15Vs
GNDs
GNDs
TO SS-BOARD (SS12)
P12
Vda
DR15V
GND
STB PS
GND
C421 50V 0.022u
C422 50V 0.022u
TO D-BOARD (D27)
P27
TP50
TP51
RUSH ON/OFF
TV ON/OFF
M_POWER
STB5V
KILL SOS
FAN SOS
PS SOS
ALL OFF
GND
D568 B0HFRJ000012
12V
C564 100p 1kV
C572 25V 2200u
C591 100p 1kV
D660 B0HFRJ000012
15V
C590 25V 2200u
R619 4.7k
R621 4.7k
C570 1kV 470p
70V
D573 B0HFRJ000012
C576 25V 2200u
12V
C571 1kV 100p
D574 B0HFRJ000012
C577 25V 2200u
15V
D661 MA3X152K0L
D581 MA3X152K0L
D582 MA3X152K0L
7V
Q552 B1DEGQ000019
R595 470
1/2W
D576 B0HCMM000001
D577 MA3X152K0L
D579 MA3X152K0L
R593 100k
R594 22
R601 6.8k
R596 6.8k
R599 4.7k
R607 150
Q554 2SC3311A0A
R608 6.8k
R609 12.1k
R610 3.3k
4V
C578 50V 3300p
Q553 2SB0621AWA
D575 B0JCME000025
D578 MA3X152K0L
D580 MA3X152K0L
R611 1.5k
R612 2.55k
C565
R589 49.9k
R583 2.2k
R561 12.1k
12V
IC555 C0DAAHG00007
V IN
V OUT
GND
VO S
ON/OFF
AVR5V
D587 B0JCME000025
R615 1k
L554 220u
C581 6.3V 1200u
R618 68
R620 68
C583 50V 0.1u
5V
C579 25V 220u
D589 B0HCMM000001
R586 100
C567 4700p 50V
R590 10k
2.5V
Vda
IC557 C0DAEJC00003
ERROR DETECT
R588 47k
R635 2.55k
ERROR DETECT
IC554 C0DAEJC00003
7V
IC403 AN7705F
AVR5V
IN OUT COM
C418 16V 100u
C419 10V 470u
C414 560p 500V
D409 B0HCMM000001
C416 16V 470u
D410 B0HCMM000001
R417 100k
C417 25V 47u
R420 10k
Q404 2SC3311A0A
R418 0
D411 B0HCMM000001
D412 MAZ30510ML
R421 10k
R422 10k
R412 220 1/2W
R415 3.9k
R571 0
C415 4700p 50V
R414 47k
IC402 C0DAEJC00003
ERROR DETECT
R416 2.55k
Q401 2SC3311A0A
R425 47k
R426 4.7k
Q403 2SC3311A0A
R424 47k
R427 4.7k
Q402 2SC3311A0A
R423 22k
C420 25V 100u
R428 22k
C586 50V 0.01u
R629 47 1/2W
R630 4.7k
Q558 2SC3311A0A
R631 100k
P10
DR15V
GND
FAN SOS
5V
FAN_CON
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
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17
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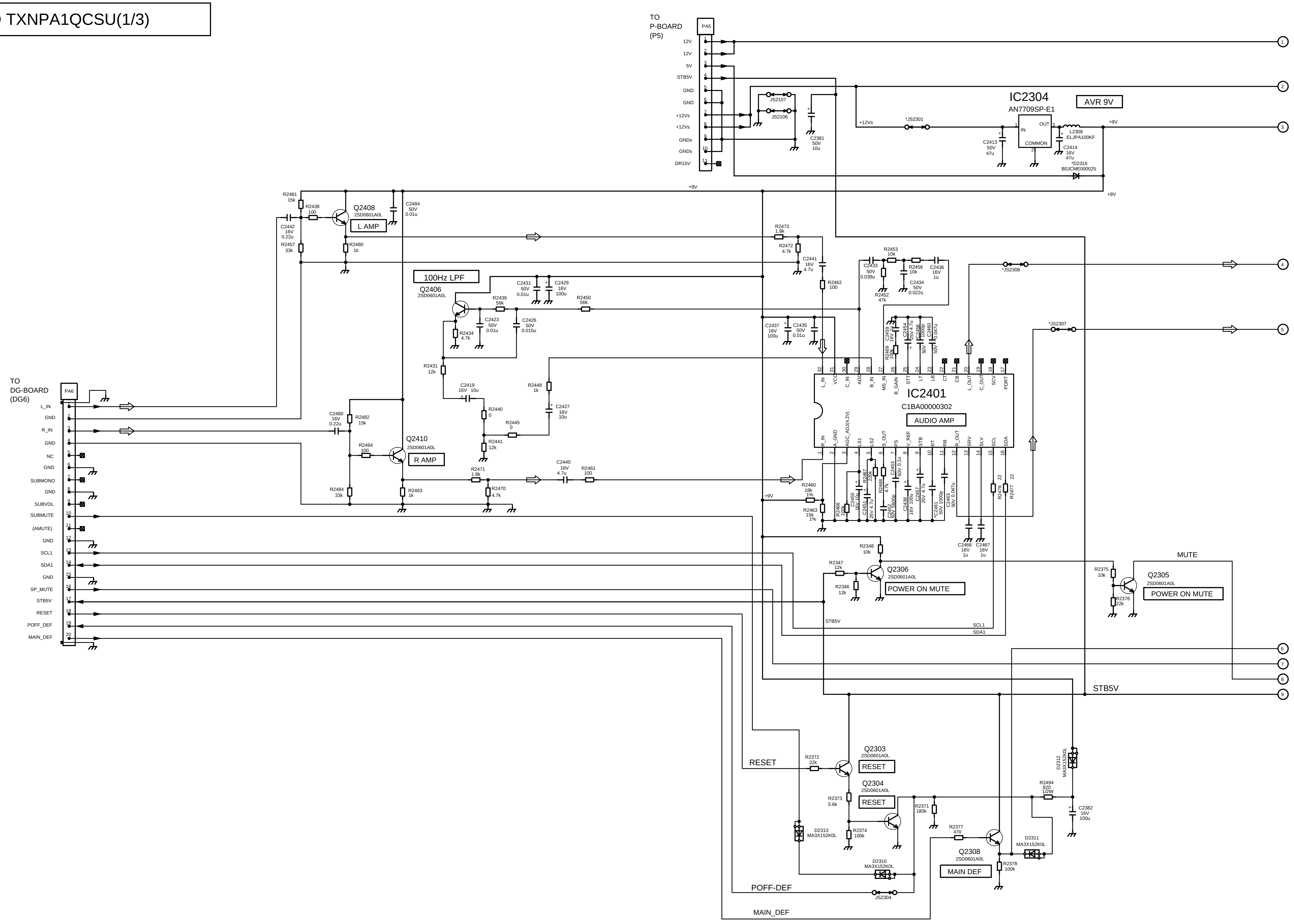
TH-42PA20U
PF and P-Board(2of2)Schematic Diagram

TH-42PA20U
PF and P-Board(2of2)Schematic Diagram

10 11 12 13 14 15 16 17 18

⚠ PA-BOARD TXNPA1QCSU(1/3)


TO
P-BOARD
(P5)
PA5
12V
12V
5V
STB5V
GND
GND
+12Vs
+12Vs
GNDs
GNDs
DR15V
JS2107
JS2106
C2381 50V 10u
+12Vs
*JS2301
IC2304
AN7709SP-E1
AVR 9V
IN
OUT
COMMON
C2413 50V 47u
L2306 ELJPA100KF
C2414 16V 47u
*D2316 B0JCME000025
+9V
+9V
+9V
R2481 15k
R2438 100
Q2408 2SD0601A0L
L AMP
C2484 50V 0.01u
C2442 16V 0.22u
R2457 33k
R2480 1k
R2473 1.8k
R2472 4.7k
C2441 16V 4.7u
R2462 100
C2433 50V 0.039u
R2453 10k
R2456 10k
C2436 16V 1u
C2434 50V 0.022u
R2452 47k
*JS2308
100Hz LPF
Q2406 2SD0601A0L
C2431 50V 0.01u
C2429 16V 100u
R2439 56k
R2450 56k
C2423 50V 0.01u
C2426 50V 0.015u
R2434 4.7k
C2437 16V 100u
C2435 50V 0.01u
*JS2307
R2431 12k
C2419 16V 10u
R2448 1k
C2427 16V 10u
R2440 0
R2445 0
R2441 12k
IC2401
C1BA00000302
AUDIO AMP
L_IN VCC C_IN ADJ B_IN MS_IN B_GAIN STT LT LB CT CB L_OUT C_OUT SCV PORT
R_IN A_GND AGC_ADJ(4.2V) LS1 LS2 S_OUT PS V_REF STB RT RB R_OUT SRV SLV SCL SDA
TO
DG-BOARD
(DG6)
PA6
L_IN
GND
R_IN
GND
NC
GND
SUBMONO
GND
SUBVOL
SUBMUTE
(AMUTE)
GND
SCL1
SDA1
GND
SP_MUTE
STB5V
RESET
POFF_DEF
MAIN_DEF
C2480 16V 0.22u
R2482 15k
R2464 100
Q2410 2SD0601A0L
R AMP
R2484 33k
R2483 1k
R2471 1.8k
R2470 4.7k
C2440 16V 4.7u
R2461 100
R2460 18k 1%
R2463 15k 1%
R2466 10k
C2450 16V 100u
C2451 25V 4.7u
R2467 220k
R2468 4.7k
C2453 50V 0.1u
C2452 50V 3300p
C2438 16V 100u
C2457 25V 4.7u
*C2461 50V 1000p
C2463 50V 0.047u
R2476 22
R2477 22
C2466 16V 1u
C2467 16V 1u
R2469 10k
C2459 16V 1u
C2454 50V 4.7u
C2458 50V 4.7u
C2460 50V 0.047u
R2348 10k
R2347 12k
R2346 12k
Q2306 2SD0601A0L
POWER ON MUTE
STB5V
SCL1
SDA1
MUTE
R2375 10k
R2376 22k
Q2305 2SD0601A0L
POWER ON MUTE
STB5V
RESET
R2372 22k
Q2303 2SD0601A0L
RESET
Q2304 2SD0601A0L
RESET
R2373 5.6k
R2374 100k
R2371 180k
D2313 MA3X152K0L
D2310 MA3X152K0L
R2377 470
Q2308 2SD0601A0L
MAIN DEF
R2378 100k
D2311 MA3X152K0L
R2494 820 1/2W
C2382 16V 100u
D2312 MA3X152K0L
POFF-DEF
JS2304
MAIN_DEF
①
②
③
④
⑤
⑥
⑦
⑧
⑨

A
B
C
D
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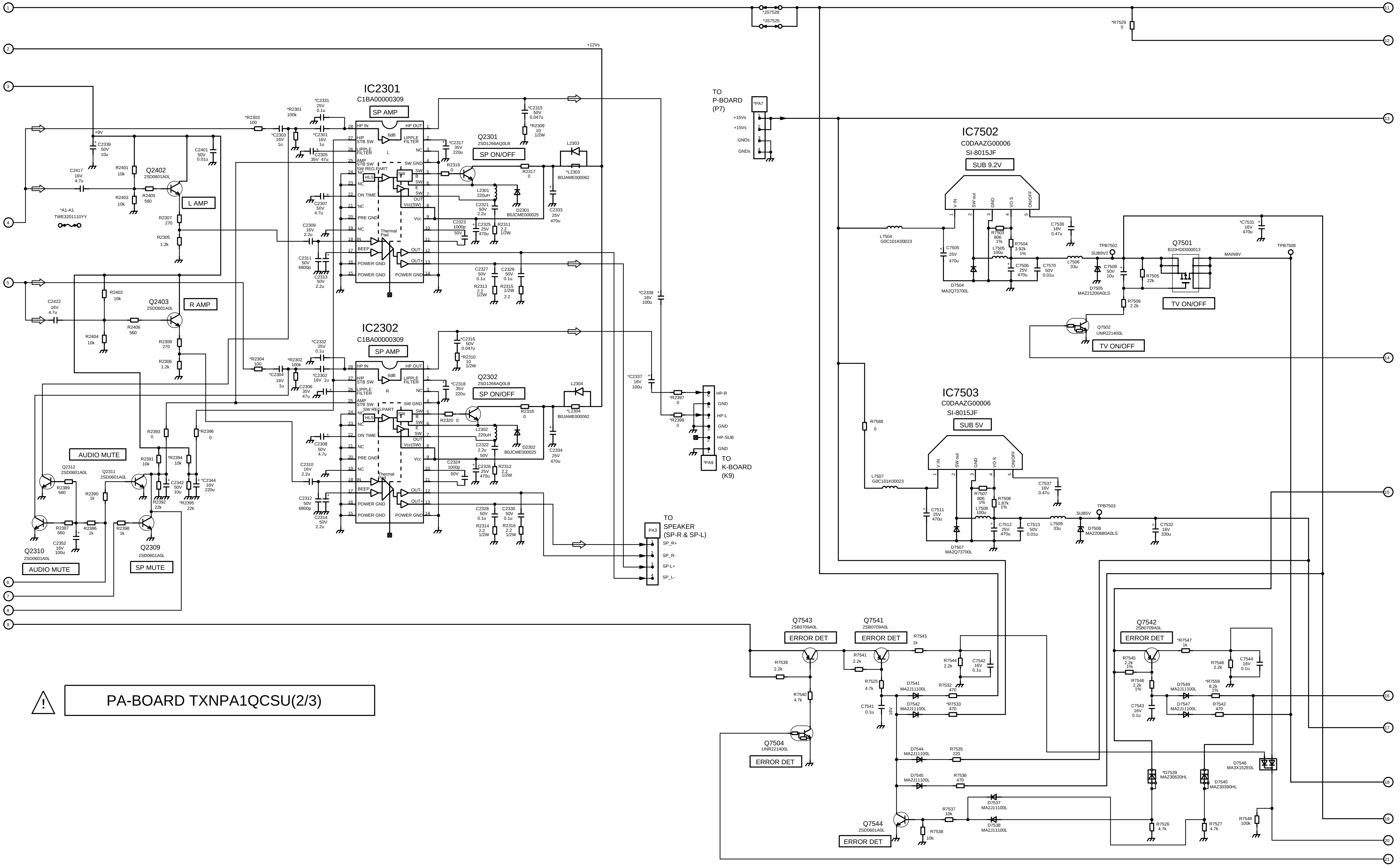
TH-42PA20U
PA-Board(1of3)Schematic Diagram

TH-42PA20U
PA-Board(1of3)Schematic Diagram


IC2301
C1BA00000309
SP AMP
IC2302
C1BA00000309
SP AMP
Q2301
2SD1266AQ0LB
SP ON/OFF
Q2302
2SD1266AQ0LB
SP ON/OFF
Q2402
2SD0601A0L
L AMP
Q2403
2SD0601A0L
R AMP
AUDIO MUTE
Q2312
2SD0601A0L
Q2311
2SD0601A0L
Q2310
2SD0601A0L
AUDIO MUTE
Q2309
2SD0601A0L
SP MUTE
*A1-A1
TWE3201110YY
+9V
+12Vs
HP IN
STB SW
LIPPLE FILTER
AMP STB SW
NC
ON TIME
PRE GND
IN
BEEP
POWER GND
HP OUT
LIPPLE FILTER
SW GND
SW
OUT
Vcc(SW)
Vcc
OUT-
OUT+
SW REG PART
HLS
Thermal Pad
6dB
L2301
220uH
L2302
220uH
L2303
B0JAME000062
L2304
B0JAME000062
D2301
B0JCME000025
D2302
B0JCME000025
TO
P-BOARD
(P7)
*PA7
+15Vs
GNDs
TO
K-BOARD
(K9)
*PA9
HP-R
GND
HP-L
HP-SUB
TO
SPEAKER
(SP-R & SP-L)
PA3
SP_R+
SP_R-
SP_L+
SP_L-
*JS7528
*JS7525
IC7502
C0DAAZG00006
SI-8015JF
SUB 9.2V
IC7503
C0DAAZG00006
SI-8015JF
SUB 5V
V IN
SW out
GND
VO S
ON/OFF
L7504
G0C101K00023
L7507
G0C101K00023
D7504
MA2Q73700L
D7507
MA2Q73700L
D7505
MAZ21200A0LS
D7508
MAZ20680A0LS
TPB7502
SUB9V2
TPB7503
SUB5V
TPB7508
MAIN9V
Q7501
B1DHDD000013
TV ON/OFF
Q7502
UNR221400L
TV ON/OFF
Q7543
2SB0709A0L
ERROR DET
Q7541
2SB0709A0L
ERROR DET
Q7542
2SB0709A0L
ERROR DET
Q7504
UNR221400L
ERROR DET
Q7544
2SD0601A0L
ERROR DET
D7541
MA2J11100L
D7542
MA2J11100L
D7544
MA2J11100L
D7545
MA2J11100L
D7537
MA2J11100L
D7538
MA2J11100L
D7549
MA2J11100L
D7547
MA2J11100L
*D7539
MAZ30620HL
D7540
MAZ30390HL
D7546
MA3X152E0L
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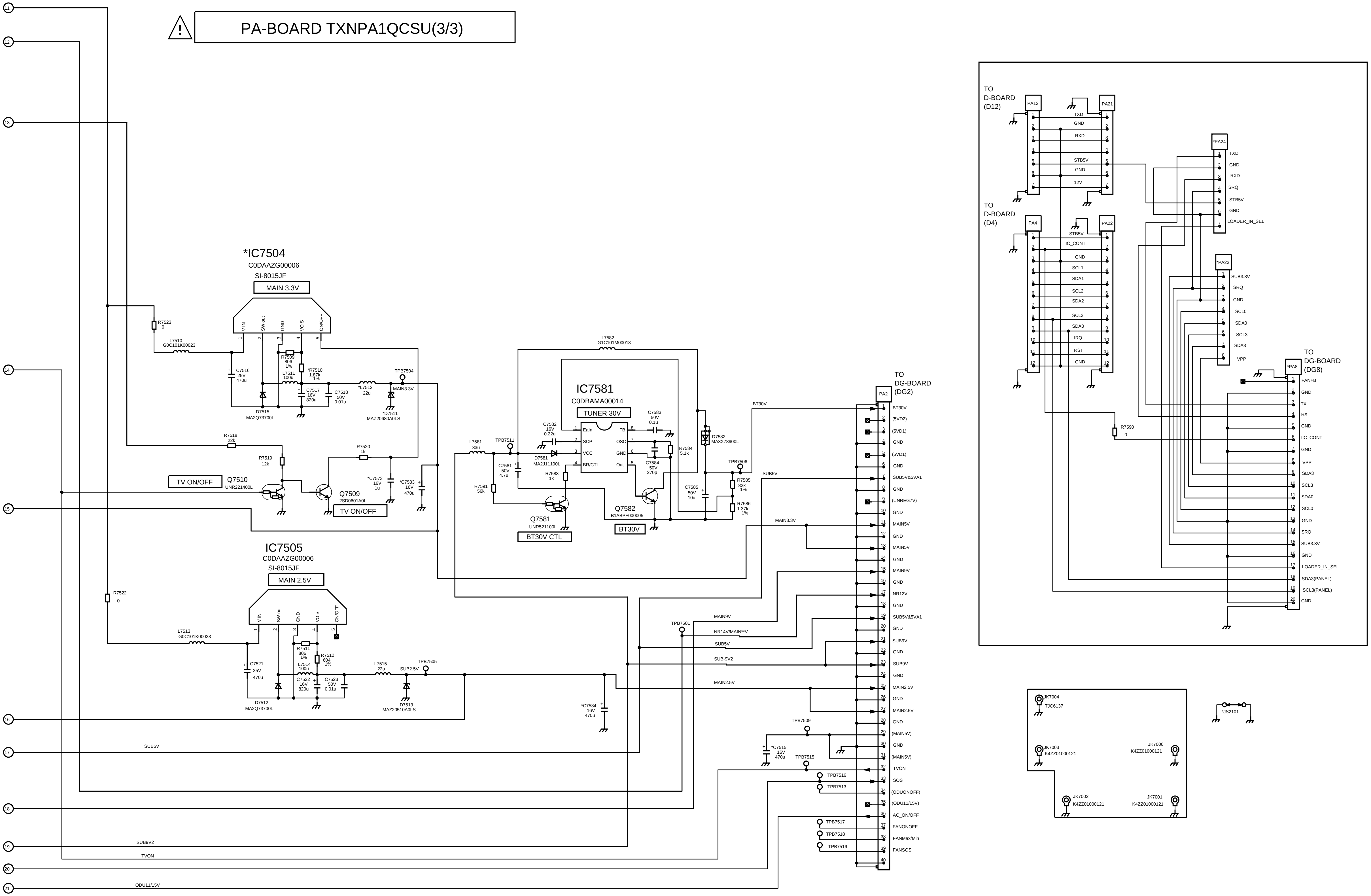
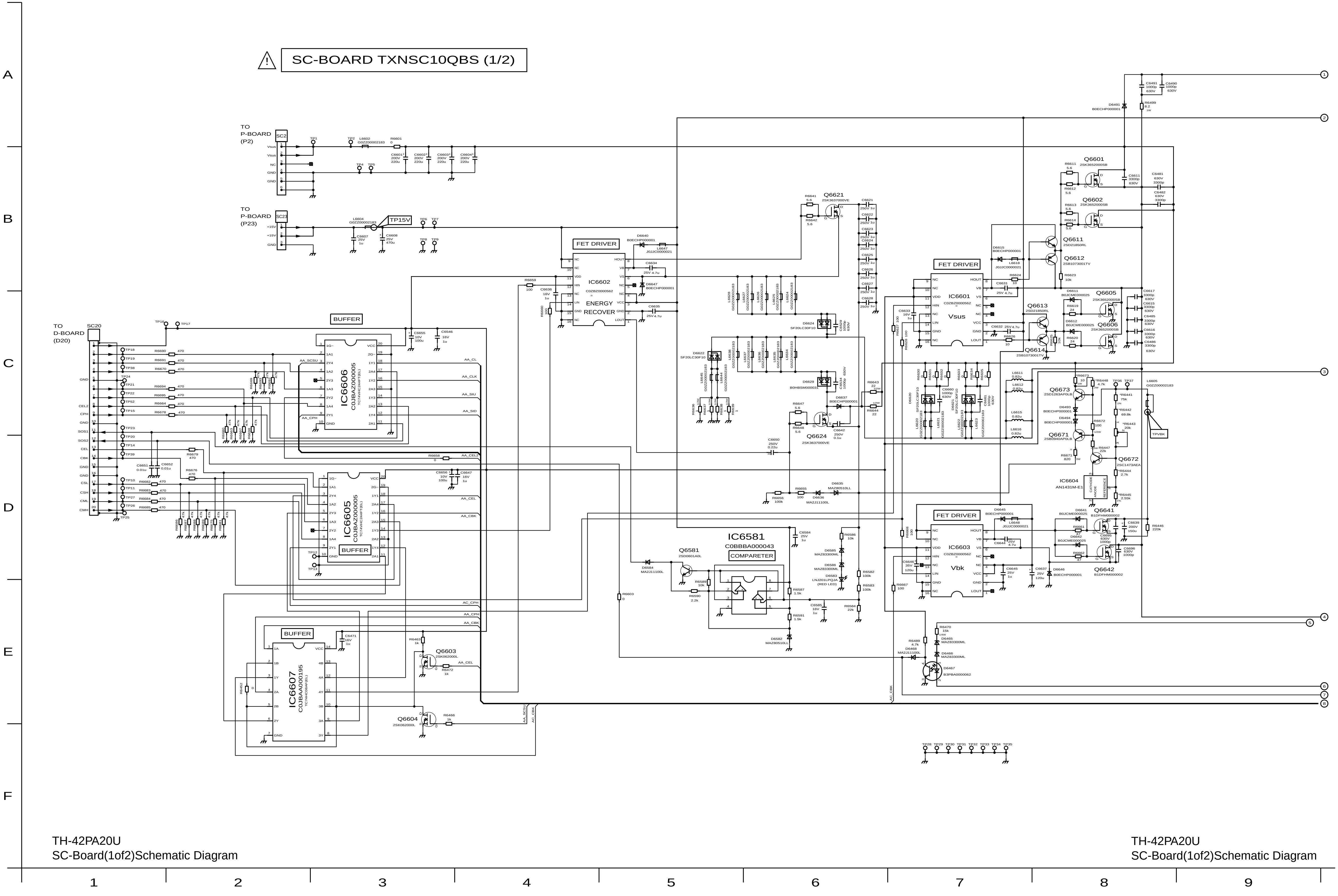
PA-BOARD TXNPA1QCSU(2/3)


PA-BOARD TXNPA1QCSU(3/3)
*IC7504
C0DAAZG00006
SI-8015JF
MAIN 3.3V
V IN
SW out
GND
VO S
ON/OFF
R7523 0
L7510 G0C101K00023
C7516 25V 470u
R7509 806 1%
L7511 100u
*R7510 1.87k 1%
C7517 16V 820u
C7518 50V 0.01u
*L7512 22u
TPB7504
MAIN3.3V
D7515 MA2Q73700L
*D7511 MAZ20680A0LS
R7518 22k
R7519 12k
R7520 1k
TV ON/OFF
Q7510 UNR221400L
Q7509 2SD0601A0L
*C7573 16V 1u
*C7533 16V 470u
IC7505
C0DAAZG00006
SI-8015JF
MAIN 2.5V
R7522 0
L7513 G0C101K00023
C7521 25V 470u
R7511 806 1%
R7512 604 1%
L7514 100u
C7522 16V 820u
C7523 50V 0.01u
L7515 22u
SUB2.5V
TPB7505
D7512 MA2Q73700L
D7513 MAZ20510A0LS
*C7534 16V 470u
SUB5V
SUB9V2
TVON
ODU11/15V
11
12
13
14
15
16
17
18
19
20
21
IC7581
C0DBAMA00014
TUNER 30V
L7582 G1C101M00018
EaIn
SCP
VCC
BR/CTL
FB
OSC
GND
Out
C7582 16V 0.22u
C7583 50V 0.1u
C7584 50V 270p
R7584 5.1k
D7582 MA3X78900L
L7581 33u
TPB7511
C7581 50V 4.7u
D7581 MA2J11100L
R7583 1k
R7591 56k
Q7581 UNR521100L
BT30V CTL
Q7582 B1ABPF000005
BT30V
C7585 50V 10u
TPB7506
R7585 82k 1%
R7586 1.37k 1%
MAIN3.3V
MAIN9V
TPB7501
NR14V/MAIN**V
SUB5V
SUB-9V2
MAIN2.5V
TPB7509
*C7515 16V 470u
TPB7515
TPB7516
TPB7513
TPB7517
TPB7518
TPB7519
TO DG-BOARD (DG2)
PA2
1 BT30V
2 (5VD2)
3 (5VD1)
4 GND
5 (5VD1)
6 GND
7 SUB5V&5VA1
8 GND
9 (UNREG7V)
10 GND
11 MAIN5V
12 GND
13 MAIN5V
14 GND
15 MAIN9V
16 GND
17 NR12V
18 GND
19 SUB5V&5VA1
20 GND
21 SUB9V
22 GND
23 SUB9V
24 GND
25 MAIN2.5V
26 GND
27 MAIN2.5V
28 GND
29 (MAIN5V)
30 GND
31 (MAIN5V)
32 TVON
33 SOS
34 (ODUONOFF)
35 (ODU11/15V)
36 AC_ON/OFF
37 FANONOFF
38 FANMax/Min
39 FANSOS
40
TO D-BOARD (D12)
PA12
PA21
TXD
GND
RXD
STB5V
GND
12V
*PA24
TXD
GND
RXD
SRQ
STB5V
GND
LOADER_IN_SEL
TO D-BOARD (D4)
PA4
PA22
STB5V
IIC_CONT
GND
SCL1
SDA1
SCL2
SDA2
SCL3
SDA3
IRQ
RST
GND
*PA23
SUB3.3V
SRQ
GND
SCL0
SDA0
SCL3
SDA3
VPP
TO DG-BOARD (DG8)
*PA8
1 FAN+B
2 GND
3 TX
4 RX
5 GND
6 IIC_CONT
7 GND
8 VPP
9 SDA3
10 SCL3
11 SDA0
12 SCL0
13 GND
14 SRQ
15 SUB3.3V
16 GND
17 LOADER_IN_SEL
18 SDA3(PANEL)
19 SCL3(PANEL)
20 GND
R7590 0
JK7004 TJC6137
JK7003 K4ZZ01000121
JK7006 K4ZZ01000121
JK7002 K4ZZ01000121
JK7001 K4ZZ01000121
*JS2101

TH-42PA20U
PA-Board(3of3)Schematic Diagram

TH-42PA20U
PA-Board(3of3)Schematic Diagram

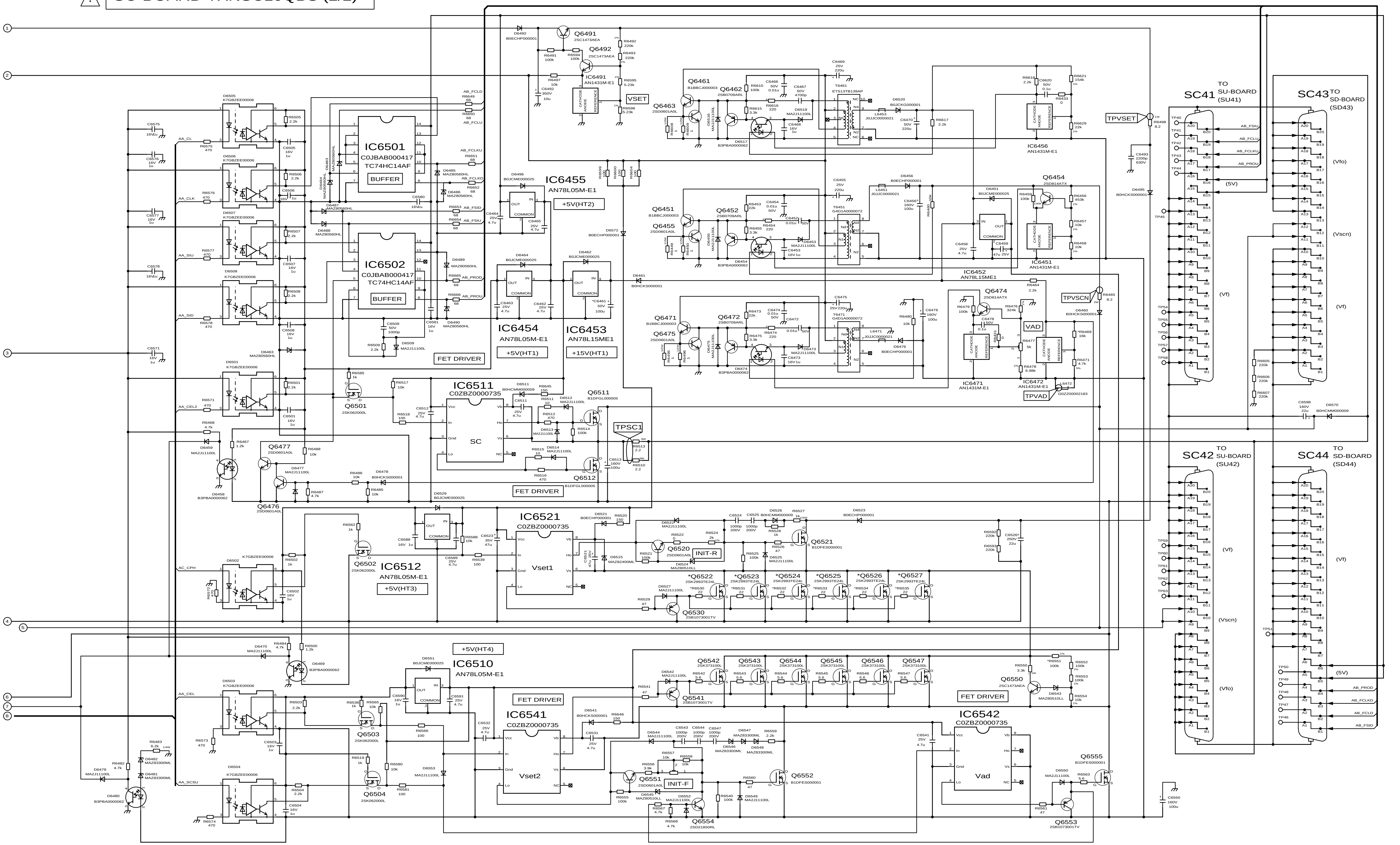
16 17 18 19 20 21 22


SC-BOARD TXNSC10QBS (1/2)
TO P-BOARD (P2)
SC2
TO P-BOARD (P23)
SC23
TP15V
TO D-BOARD (D20)
SC20
BUFFER
IC6606
C0JBAZ000005
IC6605
C0JBAZ000005
IC6607
C0JBAA000195
FET DRIVER
IC6602
ENERGY RECOVER
IC6601
Vsus
IC6603
Vbk
IC6581
C0BBBA000043
COMPARETER
IC6604
AN1431M-E1
Q6601
Q6602
Q6611
Q6612
Q6613
Q6614
Q6605
Q6606
Q6621
Q6624
Q6673
Q6671
Q6672
Q6641
Q6642
Q6581
Q6603
Q6604
TPVBK
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AA_CEL
AA_CBK
AC_CPH
AA_CPH
AC_CBK
AA_SCSU
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

TH-42PA20U
SC-Board(1of2)Schematic Diagram

TH-42PA20U
SC-Board(1of2)Schematic Diagram

⚠ SC-BOARD TXNSC10QBS (2/2)

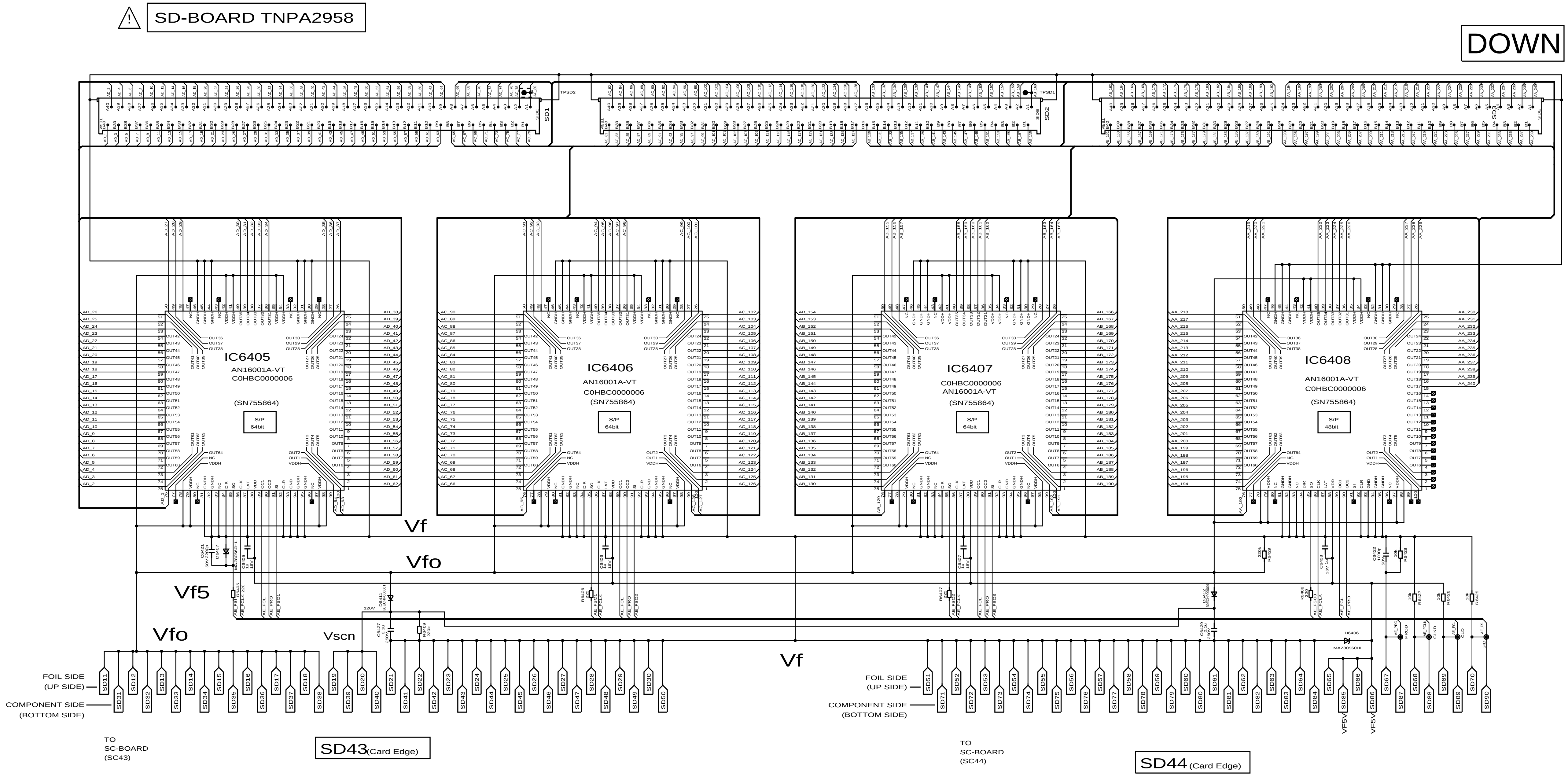


①
②
③
④
⑤
⑥
⑦
⑧
IC6501
C0JBAB000417
TC74HC14AF
BUFFER
IC6502
C0JBAB000417
TC74HC14AF
BUFFER
IC6455
AN78L05M-E1
+5V(HT2)
IC6454
AN78L05M-E1
+5V(HT1)
IC6453
AN78L15ME1
+15V(HT1)
FET DRIVER
IC6511
C0ZBZ0000735
SC
Q6511
Q6512
TPSC1
IC6512
AN78L05M-E1
+5V(HT3)
IC6521
C0ZBZ0000735
Vset1
Q6520
INIT-R
Q6521
*Q6522
*Q6523
*Q6524
*Q6525
*Q6526
*Q6527
Q6530
IC6510
AN78L05M-E1
+5V(HT4)
IC6541
C0ZBZ0000735
Vset2
Q6551
INIT-F
Q6552
Q6554
Q6541
Q6542
Q6543
Q6544
Q6545
Q6546
Q6547
Q6550
IC6542
C0ZBZ0000735
Vad
Q6553
Q6555
Q6491
Q6492
IC6491
AN1431M-E1
VSET
Q6461
Q6462
Q6463
T6461
IC6456
AN1431M-E1
TPVSET
Q6451
Q6452
Q6455
T6451
Q6454
IC6451
AN1431M-E1
IC6452
AN78L15ME1
Q6474
Q6471
Q6472
Q6475
T6471
TPVSCN
VAD
IC6471
AN1431M-E1
IC6472
AN1431M-E1
TPVAD
Q6501
Q6502
Q6503
Q6504
Q6476
Q6477
D6458
D6469
D6480
SC41 TO SU-BOARD (SU41)
SC43 TO SD-BOARD (SD43)
SC42 TO SU-BOARD (SU42)
SC44 TO SD-BOARD (SD44)
(Vfo)
(5V)
(Vscn)
(Vf)
AB_FSIU
AB_FCLU
AB_FCLKU
AB_PROU
AB_PROD
AB_FCLKD
AB_FCLD
AB_FSID
AA_CL
AA_CLK
AA_SIU
AA_SID
AA_CEL2
AC_CPH
AA_CEL
AA_SCSU

TH-42PA20U
SC-Board(2of2)Schematic Diagram

TH-42PA20U
SC-Board(2of2)Schematic Diagram

10 11 12 13 14 15 16 17 18



SD-BOARD TNPA2958
DOWN
SD1
SD2
SD3
TPSD1
TPSD2
IC6405
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6406
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
64bit
IC6407
C0HBC0000006
AN16001A-VT
(SN755864)
S/P
64bit
IC6408
AN16001A-VT
C0HBC0000006
(SN755864)
S/P
48bit
Vf
Vfo
Vf5
Vfo
Vscn
Vf
120V
D6406
MAZ80560HL
FOIL SIDE
(UP SIDE)
COMPONENT SIDE
(BOTTOM SIDE)
SD11 SD12 SD13 SD14 SD15 SD16 SD17 SD18 SD19 SD20 SD21 SD22 SD23 SD24 SD25 SD26 SD27 SD28 SD29 SD30
SD31 SD32 SD33 SD34 SD35 SD36 SD37 SD38 SD39 SD40 SD41 SD42 SD43 SD44 SD45 SD46 SD47 SD48 SD49 SD50
SD51 SD52 SD53 SD54 SD55 SD56 SD57 SD58 SD59 SD60 SD61 SD62 SD63 SD64 SD65 SD66 SD67 SD68 SD69 SD70
SD71 SD72 SD73 SD74 SD75 SD76 SD77 SD78 SD79 SD80 SD81 SD82 SD83 SD84 SD85 SD86 SD87 SD88 SD89 SD90
VF5V
VF5V
TO
SC-BOARD
(SC43)
SD43 (Card Edge)
TO
SC-BOARD
(SC44)
SD44 (Card Edge)
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

TH-42PA20U
SD-Board Schematic Diagram

TH-42PA20U
SD-Board Schematic Diagram